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ABSTRACT

An innovation approach to teaching elementary and secondary students about the world of work was developed under ESEA Title III funds in Atlanta using 39 television programs. This program guide was adapted from the Atlanta program for use in Florida schools. Although it is built around the 39 films, most of the information will be useful to the teacher or curriculum writer in the present form. Each unit represents an occupational area, such as employment opportunities in hospitals, education, banking, or major industries such as petroleum, textiles, or newspapers. For each occupational area, specific jobs are defined according to duties, personal qualifications and training. Thus for the unit covering education, the specific jobs of principal, teacher, teacher aide, custodian, cafeteria manager, secretary, counselor, librarian, library aid, maintenance mechanic, and statistician are outlined. Suggested supplementary activities, a glossary of related vocabulary terms as listed in each unit, and recommended references are included. (CD)

ED 059364

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guide for

OCCUPATIONAL
INFORMATION
FOR UPPER ELEMENTARY
AND MIDDLE GRADES

COUNTDOWN TO THE 70's

1

VT014441

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TALLAHASSEE, FLORIDA
FLOYD T. CHRISTIAN, Commissioner

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ED 059364

"COUNTDOWN TO THE 70'S"

OCCUPATIONAL INFORMATION FOR UPPER ELEMENTARY AND MIDDLE GRADES

DIVISION OF VOCATIONAL, TECHNICAL AND ADULT EDUCATION

CARL W. PROEHL, Director

PROGRAM SERVICES

WALTER H. WRAY, Administrator

ROD R. DUGGER,

Assistant Administrator

FLOYD T. CHRISTIAN
COMMISSIONER

STATE OF FLORIDA
DEPARTMENT OF EDUCATION

TALLAHASSEE 32304

CARL W. PROEHL
DIRECTOR
DIVISION OF VOCATIONAL,
TECHNICAL,
AND ADULT EDUCATION

ED 092334

FOREWORD

Two hundred years ago, Ben Franklin told his fellow Americans that a man who has a trade has an estate. This is even more true today. In today's marketplace, warm bodies and strong backs without employment skills find it almost impossible to compete for jobs.

At the same time that many youth and adults are unable to find or keep jobs, there is a great demand in the State for trained workers.

The 1970 session of the Florida Legislature mandated that the public school system of the State place emphasis upon student orientation to, familiarization with, and preparation for the world of work, beginning when the student enters the elementary grades and continuing until he graduates from or leaves school.

The information included in this guide and the set of 16 mm. films are provided for teachers of the middle grades to assist them in familiarizing their students with many of the occupations in which people work. Only through the possession of knowledge about occupations can young people adequately assess the career opportunities available to them, and begin to wisely develop their own career plans.

These films may be utilized by educational television stations or by individual schools using regular 16 mm. projectors. The first two films in the series should be the first two programs scheduled for viewing since they introduce the series. The other programs need not be scheduled in the sequence listed in the table of contents of this manual. All communications concerning scheduling and distribution of the films and distribution of the study guides should be addressed to the Educational Television and Radio Section, Bureau of Elementary and Secondary Education, Department of Education, Knott Building, Tallahassee, Florida 32304.

It is my belief that these materials will make an important contribution to the education of all youth. However, the impact of this contribution will ultimately depend upon the way in which the material is presented to the students. The team effort provided by local media centers, county staff members, teachers and educational television stations will enable the materials to reach their intended audience and serve the purpose for which they were designed.

Carl W. Proehl
Director
Division of Vocational,
Technical and Adult Education

ACKNOWLEDGEMENTS

The series, "Countdown to the 70's," was developed by the Atlanta public school system, as a project funded under Title III of the Elementary and Secondary Education Act, to demonstrate an innovative approach to teaching children about the world of work.

Telecasts from WETV in Atlanta have communicated accurate occupational information to thousands of children who have viewed the 39 programs in the series. In addition, kinescopes of the programs have been viewed by numerous business and professional groups as well as school personnel and pupils in many Georgia communities.

Feeling that this series of programs is of high quality and contains the type of world-of-work information needed by Florida's students in the upper elementary and middle grades, the Division of Vocational, Technical and Adult Education, Department of Education, has purchased kinescopes of the programs. The program guides used in the Atlanta project have been adapted for use with the permission of the Director of the Atlanta Project.

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COUNTDOWN TO THE 70's

THEME SONG

I

Come along with me,
Let's count down to the 70's
Come along with me,
Let's see what there's to see
Of the work yet to be done,
New conquests to be won,
In science and industry.

II

So, let me take you by the hand,
Together we will understand
That there's a place for you and me
In the bright new 70's
There's no need to fret and worry;
There's really no big hurry
To say what we're going to be.

III

The wondrous world of work awaits us,
The best things are yet to come.
What bend in the road will we soon be taking?
The choice is one of your own making.

IV

Come along with me,
Start the count down to the 70's.
We can hardly wait to know
What the future has to hold.
Let's get the show on the road,
Let our story unfold
As we count down to the 70's.
('68, '69, 70's)

Words & Music: Ainsley Deutsch

INTRODUCTION

To The Teacher:

This project was planned and produced to assist you in:

Providing accurate occupational information to pupils so that they may understand the various vocational opportunities that might be open to them in the future;

Demonstrate the role of work in the lives of people, and helping pupils understand the role of work in their lives;

Helping pupils develop positive attitudes toward work, including a respect for all levels of work;

Motivating pupils to stay in school and make realistic educational choices as they progress through high school;

Helping pupils understand the significance of attitudes and good work habits in career development.

With your encouragement, children may look ahead realistically toward their own future experiences in the world of work.

In "Countdown to the 70's," Ainsley Deutsch, the television teacher, and CLOD, his computer associate, follow a humorous theme of whimsical conflict throughout the series in order to attract and hold the children's attention. Mr. Deutsch is also cast in the role of a worker in some of the programs.

CLOD, which is short for "Computer Long-Range Occupational Director," is actually a machine. By continuously feeding occupational information into CLOD, he is kept up to date; and by programming facts into his memory banks he is able to compute all kinds of information about jobs. This is pretty much the same way our own minds work, for we also have to have items of information fed into our minds and stored in the memory banks before they can be recalled for computation. CLOD is always playing practical jokes on Ainsley.

The program begins with Ainsley Deutsch (AD) and CLOD in the Central Room at the Job Information Center. In the Center all types of up-to-date books, reports, publications and studies are available, making it possible for CLOD to always be programmed with the latest information. Also in the Central Room of the Job Information Center is a teletransportation booth which is the make believe machine used in transporting AD and the viewers from the Central Room to the site of the jobs.

As AD narrates each film sequence, the teletransportation booth takes him and the viewers to the sites of the jobs, and CLOD furnishes the information.

This study guide contains suggestions for supplementary activities. Additional suggestions are included for the first four programs which should help your pupils relate their own experiences to the material presented in the film. This same approach should be used with each program in the series.

The first two programs in the series, "Hospital Team" (Parts I and II), should be the first two programs and should be viewed in sequence by the students. The other programs do not necessarily have to be shown in the same sequence as listed in the table of contents.

SUPPLEMENTARY ACTIVITIES

INTRODUCTION

The teacher will be able to introduce many co-curricular activities which may encourage children to learn facts about different kinds of work. Because they are in an exploratory stage of development during the upper elementary grades, it is not advisable to suggest that the pupils select specific occupational goals.

Kinescopes of the television programs are available to teachers. They can be used with your school projector in the same way as motion picture films.

VOCABULARY

In order to meet the needs of your class, you may wish to modify the related vocabularies provided in this guide. An attempt has been made to include words which represent a range of difficulty levels.

ADVANCED TRAINING INSTITUTIONS

In most programs, the narrator will refer to college, junior college, technical school, or high school training. It will be helpful to your class if you will explain the types of training offered by these institutions.

SUPPLEMENTARY ACTIVITIES

1. Obtain old magazines for pupils to use in collecting pictures of people at work. Other faculty members and friends can help you.

2. Prepare a resource file folder for each program and begin collecting pictures, posters, etc., for display use.

3. Consult your librarian about availability of recommended books.

4. Organize pupils into teams to collect pictures of workers and to prepare weekly bulletin board displays.

5. Discuss the program series with pupils.

6. Write the words of the theme song on the chalkboard for pupils to copy and encourage them to sing along with the telecast.

7. Present films and filmstrips describing related occupations.

8. Encourage pupils to read books about occupations for leisure reading or for oral and written reports.

9. Pupils can assume the roles of workers through dramatic play. They can write short plays based on their interpretations of programs in "Countdown to the 70's," outside reading, or interviews with employed acquaintances.

10. With your guidance, pupils can also create the roles of various workers through spontaneous role playing. For example: activities in a hospital pharmacy, a retail store, or a school library.

11. Use experiments and displays which may expand concepts presented in the programs. For example: different kinds of thermometers might be demonstrated in connection with "The Hospital Team," model airplane construction with "Aircraft Manufacturing," or a toy car display with "The Car in Your Future."

12. Children may make scrapbooks on occupations and include pictures, clippings and original stories or reports of interviews with workers.

13. Pupils may be encouraged to interview acquaintances in various lines of work and report on these to the class.

14. Invite parents and other relatives of pupils to visit your class and describe their work.

15. Plan a field trip to a business or industry of interest to your class. It is, of course, advisable to investigate available tours, transportation, and school policy before discussing the visit with pupils.

16. Let children help develop a vocabulary list to supplement words provided in the lesson guides.

17. Pupils may take photographs of people at work.

18. Ask pupils to write stories or poems which reflect their concepts and interpretations of facts about workers.

19. Let pupils draw pictures to illustrate various jobs. Use for displays.

20. Organize pupils into teams to collect or draw pictures of people at work and use these in preparing weekly bulletin boards.

21. Ask children to help develop a chart of the major industries in the community, showing how they contribute to community well-being.

22. List some of the many occupations on which your community depends for successful business and industry.

Hospital Team

PART I

COUNTDOWN TO THE 70's

Study Guides

Program 1: The Hospital Team (Part I)

Purpose – The purpose of the program is to present the work of the following selected members of the hospital team: doctor, nurse, orderly, radiologic technologist, and ambulance driver.

Concept Highlighted – Each member of the hospital team performs a valuable function, working interdependently with others to prevent or relieve suffering. Many health workers, with a wide range of responsibilities, will be needed in the 70's.

Before the Telecast

1. Collect or draw pictures of hospital team members performing the work within the hospital.
2. Make a display of pictures of members of the hospital team and settings in which they work.
3. List on chalkboard the workers to be viewed in this program. Study spelling.
4. List on chalkboard the related vocabulary for this telecast. Study spelling and definitions.

During the Telecast

The work of the hospital team will be discussed and illustrated. Views of the work settings at Grady Hospital will be presented.

After the Telecast

Discussion:

1. Discuss the work of the members of the hospital team that you viewed. How do their jobs differ and how are they alike?
2. What kinds of training do you think are required for each of the jobs you viewed?
3. Will these people be needed more, less, or about the same in the 70's?
4. What kind of person do you think would succeed on the hospital team?
5. How do you feel about the jobs that were included in the program?

Activity:

1. Use supplementary books and films to expand concepts of this program.

Related Vocabulary (See Glossary for appropriate definitions):

apparatus	germ	pneumatic	therapy
diagnosis	instrument	procedure	
emergency	patient	stethoscope	

DOCTOR

A doctor, or physician, diagnoses and treats people who are ill or in poor health. He also tries to prevent illness and aids in the rehabilitation of sick or injured people.

DUTIES

Examines and treats patients in their offices or in hospitals.
Performs various kinds of operations.
Visits patients at home when necessary.
Duties may be limited to one of 20 fields of medicine in which physicians may specialize.

SOME PERSONAL QUALIFICATIONS

Ability to learn and to think.
Willingness to study throughout his or her lifetime.
Ability to do well in science.
A natural curiosity.
Good judgment and "stickability."
A liking for people and a sincere desire to serve them.
Good health.
Human understanding and ability to work well with others.

TRAINING

High school graduation.
4 years of college in premedical preparation.
4 years of medical college.
1 or 2 years as an intern in an approved hospital.
2 or more years of residency or additional study for specializing in one of the approved 20 fields.

PROFESSIONAL NURSE

The registered professional nurse plans and carries out a program of nursing care of patients according to doctors' orders.

DUTIES

Gives medicine and treatment prescribed by doctor.
Observes and records reactions or changes in patient's condition.
Assists in educating patients to help themselves.
Performs any duties necessary for the well-being of the patient.
May have duties of a supervisory nature.

SOME PERSONAL QUALIFICATIONS

Intelligence, integrity and a sense of responsibility.
Strong desire to help others.
Willingness to work with all types of patients.
Sympathetic and understanding nature.
Good judgment and ability to act quickly; self-discipline.
Good health and an alert mind.

TRAINING

1. Associate degree in nursing – a 2-year program usually offered by junior colleges.

– or –

2. 3-year diploma program offered by hospitals or independent schools of nursing.

– or –

3. College degree with a major in nursing.

RADIOLOGIC TECHNOLOGIST

The radiologic technologist (sometimes called x-ray technician) is trained to operate x-ray equipment and to take x-ray films (called radiographs) of various internal parts of the body. The doctor (or pathologist) uses the radiographs in determining the cause of and treatment for diseases.

DUTIES

Operates x-ray machinery.
Makes radiographs or pictures of the internal parts of the body; processes the film in the dark room; submits it to the doctor for his diagnosis.
Assists in giving radiation therapy when it is used in treatment of diseases.
Assists in use of nuclear medicine.

SOME PERSONAL QUALIFICATIONS

An aptitude for working with machines.
An interest and ability in the sciences.
Accuracy, dependability, and safety-consciousness.

TRAINING

High school graduation.
24 months of training in a school approved by the American Medical Association.
1 year's additional training required for registered radiation therapy technologist.

HOSPITAL ATTENDANT OR ORDERLY

The hospital attendant, or orderly, performs routine duties in caring for men patients in hospitals. In addition, he may be asked to perform a variety of other tasks.

DUTIES

Bathes, dresses, and shaves patients.
May massage patients or take other actions to improve their comfort.
Makes the beds and keeps the rooms tidy.
May fill trays for doctors.
Moves patients from one place to another within the hospital.
Duties may vary from hospital to hospital.

SOME PERSONAL QUALIFICATIONS

Willingness to work with all kinds of sick people.
A sincere liking for people.
A keen sense of responsibility.
A desire to relieve suffering.
A willingness to perform many kinds of tasks.

TRAINING

On-the-job training – the length of training varies with hospitals.

AMBULANCE DRIVER

The hospital ambulance driver is a person who is qualified to operate an ambulance for emergency purposes.

DUTIES

Transports sick or injured persons from home or other places of origin to hospital.
Assists in placing person on ambulance stretcher which is safely fastened in ambulance; exercises care and compassion in moving patients.
Drives ambulance rapidly but obeys all traffic laws; makes certain that all safety rules are complied with.
Assists in moving ambulance patient from ambulance to clinic or to wheel chair; returns some patients in similar manner.
Maintains ambulance in efficient operating condition and keeps ambulance neat and clean at all times.
Prepares reports regarding departure and arrival time of ambulance during emergency calls.
Administers first aid or emergency care to persons injured or ill.

SOME PERSONAL QUALIFICATIONS

Comprehensive knowledge of the city and its suburbs; knowledge of ambulances and ability to make minor repairs.
Ability to operate quickly, quietly, efficiently; sincere concern for persons who are ill or injured and a desire to relieve suffering.
Ages – 23 to 50 years.

TRAINING

High school graduation.
2 weeks special course dealing with all phases of emergency care.
Continuous on-the-job training in clinic when not making ambulance runs.

Hospital Team

Part II

COUNTDOWN TO THE 70's

Study Guide

Program 2: The Hospital Team (Part II)

Purpose – The purpose of this part is to illustrate the work of the hospital dietitian, the housekeeper, the medical laboratory assistant, the medical laboratory technologist, the occupational therapist, the physical therapist, and the pharmacist within the hospital setting.

Concept Highlighted – The successful operation of the hospital depends on the conscientious and co-operative efforts of each member of the team. Many different kinds of people with many different interests are on the hospital team.

Before the Telecast

1. Prepare display of hospital jobs to be shown in Program II
2. Discuss with children the hospital workers seen last week, reviewing their functions.
3. List on chalkboard the hospital workers to be shown this week and the related vocabulary. Study spelling and definitions.

During the Telecast

The functions of various members of the Grady Hospital team will be shown as they work together to serve patients.

After the Telecast

Discussion:

1. What occupations did you see today?
2. Describe what the workers did.
3. How were stairsteps used in a special way? Who had a typewriter?
4. How did you feel about the jobs you saw?
5. How could your school work help you in these jobs?

Activities:

1. Use supplementary books and films to increase related knowledge.
2. If any pupils have visited a hospital, let them describe the work they saw.

Related Vocabulary (See Glossary for appropriate definitions):

disinfect	menu	prescription
equipment	microscope	rehabilitate
exercise	nutrition	sterilize

THERAPEUTIC DIETITIAN

The therapeutic dietitian (shown in Countdown to the 70's) works directly with hospital patients who have special food needs.

DUTIES

Plans normal and modified diets.
Plans menus to meet individual patient's needs.
Confers with physicians about the patients' food.
Visits patients to explain their food needs; teaches them how to prepare food when they leave the hospital.
Consults with various members of hospital staff concerning patients' eating habits.
May work with patients in hospital clinic.
May supervise preparation of food.

SOME PERSONAL QUALIFICATIONS

Enthusiasm for good food and a liking for cooking both as a science and an art.
An interest in people and ability to share knowledge.
An aptitude for chemistry and related sciences.
A genuine liking of people.

TRAINING

High school graduation.
4 years college with degree in food nutrition or related subjects.
1 year dietetic internship.
Member of American Dietetic Association.

HOUSEKEEPER

The hospital housekeeper is a person who performs one or more of the many duties required to maintain the high standards of cleanliness demanded for a hospital.

The housekeeper may be the executive or administrative housekeeper who directs and is responsible for establishing standards, work methods and schedules; h i r i n g and training housekeeping personnel; inspecting work; and other duties related to housekeeping.

The housekeeping supervisor (shown in Countdown to the 70's) checks the work of a specific group of housekeepers to see that conditions of cleanliness meet the hospital's standards.

SOME PERSONAL QUALIFICATIONS

Neat appearance.
Good health.
Willingness to perform a variety of tasks.
An appreciation for cleanliness.
Ability to work with others.

TRAINING

Executive housekeeper – some hospitals require a degree (4 years college in institutional management); some require a combination of special education and practical experience.
Other positions on the housekeeping staff do not require specialized training. Many hospitals, however, provide on-the-job training.

MEDICAL LABORATORY ASSISTANT

The medical laboratory assistant performs certain simple routine tests and laboratory procedures under the direct supervision of the medical technologist or a pathologist or other qualified physicians.

DUTIES

Collects blood specimens.
Groups and types blood.
Prepares and stains slides for microorganisms.
Analyzes blood and body fluids for chemical makeup.
Examines body fluids under microscope.
May perform other duties – or may specialize in one area.

SOME PERSONAL QUALIFICATIONS

An intensive interest in the sciences and mathematics.
Ability to work well under supervision.
Eagerness to find out "why" when doing routine tests.
Ability to "stick to the job" for long periods of time.
Interest in finding out the cause of diseases.

TRAINING

High school graduation.
12-month training course in an approved hospital, laboratory school or vocational school.

MEDICAL LABORATORY TECHNOLOGIST

The medical technologist performs a variety of laboratory tests and procedures and operates special laboratory equipment under the supervision of a physician.

DUTIES

Counts blood cells.
Performs blood groupings.
Makes chemical tests of body fluids.
Identifies microorganisms found in air, milk, water, and certain body materials.
Operates special equipment and precision instruments.
Cultures bacteria to find disease-causing organisms.
(Technologists may perform other duties or may specialize in one area of technology, such as blood banking.)

SOME PERSONAL QUALIFICATIONS

Aptitude and interest in physical and biological sciences.
Precision, dependability, and sense of responsibility.
Ability to use hands quickly and easily in handling delicate equipment.
Normal vision.
Ability to distinguish fine shades of color.
Curiosity and willingness to work for long hours on one project.

TRAINING

High school graduation.
At least 3 years of college.
12 months of technical training in a school of medical technology approved by the American Medical Association.

OCCUPATIONAL THERAPIST

The occupational therapist helps patients to cure themselves by "doing." He plans creative, educational, and recreational activities that may help the patient to get well.

DUTIES

Aids patients in mental and physical therapy.
Works with doctors and other therapists in planning treatment.
Learns about patients' likes and dislikes, abilities, etc.
Decides on activity best suited to patient — such as weaving to strengthen stiff fingers.
Works to arouse and keep the patients' interest.

SOME PERSONAL QUALIFICATIONS

Warm, friendly personality.
Ability to inspire trust and respect.
A liking for and an interest in people.
Imagination for planning and putting plans into action.

TRAINING

High school graduation.
4 years college training with degree in occupational therapy.
9 or 10 months clinical training period.

PHYSICAL THERAPIST

The physical therapist helps in the rehabilitation of people with injuries or diseases affecting muscles, joints, nerves, and bones.

DUTIES

Helps patients to overcome disability through proper exercise, massage, and the use of heat or cold.
Seeks to improve circulation, strengthen muscles, and encourage the return of motion.
Retrains patient to perform activities that would be done in daily life.
Helps patient to have the right mental attitude toward treatment he receives.
Teaches patients and families how to carry on treatment at home.

SOME PERSONAL QUALIFICATIONS

Good health and friendly personality; pleasant appearance.
Ability to work easily with hands.
Patience — especially when progress may seem slow.
Unselfishness, understanding and enthusiasm.
Ability to gain confidence of others.
Ability to work with children.

TRAINING

High school graduation.
4-year college course with degree in physical therapy — followed by a period of directed clinical experience.

HOSPITAL PHARMACIST

The hospital pharmacist is custodian of the hospital's medical supplies, and he works with the doctors in filling the many prescriptions that are dispensed daily to the patients and out-patients.

DUTIES

Knows and understands the chemical composition and properties of all drugs and how to compound medicines.
Fills prescriptions according to physician's orders.
Acts as consultant on drug problems.
Has responsibility for the production, storage, quality control, and distribution of medications and related products used in the prevention, diagnosis and treatment of illness.

SOME PERSONAL QUALIFICATIONS

Interest in helping to meet the health needs of patients.
Desire to share scientific knowledge with other members of the hospital staff.
Ability in management.
An interest in pharmaceutical and clinical research.
An aptitude for science.

TRAINING

High school graduation.
5-year training program in an approved school of pharmacy.
A 1-year internship under a registered pharmacist required in some states.

Public Health

COUNTDOWN TO THE 70's

Study Guide

Program 3: Careers in Public Health

Purpose – The purpose of this program is to illustrate the functions of the following public health workers: doctor, public health nurse, health educator, sanitation assistant, and clinic aide.

Concept Highlighted – The importance of health care has made the Public Health Service significant to the individual and the community. Rising standards of health for young and old people will increase the number of jobs in the 1970's.

Before the Telecast

1. List the job titles of public health workers to be viewed and related vocabulary.
2. Collect pictures of workers.
3. Arrange a bulletin board including materials on public health.
4. Locate nearest public health clinic.

During the Telecast

The work of public health professionals and non-professionals will be demonstrated.

After the Telecast

Discussion:

1. Discuss the role of public health workers in the community. Why is their work needed?
2. What training is required for various jobs?
3. Are these people likely to be needed in the 1970's? Why?
4. How do you feel about these jobs? Which one was most interesting to you?

Related Vocabulary (See Glossary for appropriate definitions):

chronic	disease	pollution	sanitary
communicable	environment	preventive	
community	epidemic	responsibility	

PUBLIC HEALTH PHYSICIAN

The public health physician (as shown in Countdown to the 70's) is a medical doctor who serves as assistant director of the county health department.

DUTIES

Has special duties connected with the organization, planning, and work of the following health department programs:

1. Program for mothers.
2. Child health program.
3. School health program.
4. Dental health.
5. Communicable disease program.

SOME PERSONAL QUALIFICATIONS

Knowledge of the principles and practices of modern medicine.
Knowledge of practices and law relating to public health.
Ability to work with and supervise others.
Ability to use good judgment and make decisions.
Ability to plan work well and to tell others how to follow plans.

TRAINING

High school graduation.
4 years of premedical training.
4 years of medical college.
1 or 2 years as an intern in an approved hospital.

PUBLIC HEALTH NURSE

The public health nurse is a registered professional nurse. She works in the community to prevent illness as well as to care for the ill. She is employed by county or state health departments.

DUTIES

Goes into homes, schools, clinics, commerce and industry.
Gives first aid treatment.
Provides nursing care as prescribed by a physician.
Makes arrangements for immunizing patients.
Educates patients and their families about health problems.
Teaches ways and methods of preventing disease.
May perform other duties.

SOME PERSONAL QUALIFICATIONS

Knowledge of public health nursing and community needs.
A strong desire to help others.
Common sense and a sense of responsibility.
A willingness to work under unpleasant conditions with many types of people.
An alert mind and good health.

TRAINING

Graduation from college with degree in nursing which includes a program in nursing for beginning public health nursing positions.
Graduation from a state approved school of nursing and two years experience in public health nursing under supervision.

PUBLIC HEALTH EDUCATOR

The public health educator teaches people how to care for and maintain their personal health. He also tries to interest people in programs that are planned to improve community health.

DUTIES

Helps in organizing and conducting study groups, school health programs, special project groups and training programs.
Prepares and assembles necessary materials for exhibits for special public health programs.
Writes or publishes booklets, bulletins, etc., about current literature in Public Health.
Works with state and local officials in the field of public health education.
Other duties may or may not be included.

SOME PERSONAL QUALIFICATIONS

Knowledge of new developments in the field of public health education.
An interest in public health conditions and a desire to help others learn how to control their health problems.
Ability to talk to people so that they can easily understand.
Ability to work well with people.

TRAINING

High school graduation.
4 years of college.
Graduation from a school of Public Health with a Master's Degree in Public Health Education (1 or 2 years).

SANITARIAN

The public health sanitarian performs duties that are concerned with the inspection and removal of health hazards in order to make the physical environment safe for everyone.

In Countdown to the 70's, the first sanitarian pictured was in charge of supervising programs of food service, insect and rodent control, the sanitation aspects in nursing homes, kindergarten and day care centers. The second sanitarian pictured was responsible for inspecting various types of housing.

DUTIES

May include some of the following:
Directs or takes part in inspection of all food handling establishments.
Directs program of insect and rodent control; supervises operation; identifies insects and rodents; selects types of equipment and insecticide to use; checks reports and need for follow-up activity.
Directs program of sanitation inspection of nursing homes, kindergartens, and day care centers.
Takes part in investigation of reported cases of communicable diseases.
Assists in all phases of environmental sanitation when the need arises.
Promotes public interest in various phases of the local sanitation program.
Informs public of value of sound sanitation.
Inspects dwellings in assigned areas to determine if they meet housing code standards.
Inspects for such things as faulty wiring, unsound structure, or any existing hazards.
Requests owners to comply with standards of building code; allows time for cooperation.
Appears at formal hearing – or court – along with other housing inspectors.
Numerous other duties included under the title "sanitarian."

SOME PERSONAL QUALIFICATIONS

Knowledge of principles of environmental sanitation.
Skill in applying techniques employed in sanitation and investigation.
Ability to meet and work well with others.
Ability to understand and interpret plans, reports, etc.
Ability in organization and management.

TRAINING

High school graduation.
4-year college course with 40-quarter hours in science.

SANITATION ASSISTANT

A sanitation assistant aids public health sanitarians in the inspection of residences, commercial buildings, or institutions to see that they comply with regulations and ordinances.

DUTIES

Inspects food service establishments, schools, kindergartens, tourist courts, swimming pools, and trailer parks for sanitation and safety.
Inspects sanitary facilities in various types of housing.
Takes water and milk samples for analysis.
Inspects for rats and takes necessary steps for rodent control.
Performs any of the various duties that may be required by his supervisors.

SOME PERSONAL QUALIFICATIONS

Ability to investigate and to keep accurate records.
Ability to meet and deal with the public.
Ability to use judgment in acting on matters that can be decided or acted upon by him.
18 years of age minimum.

TRAINING

High school graduation.
On-th-job training – length may vary with work location.

CLINIC AIDE

The clinic aide assists physicians, nurses, and other personnel in the various clinics of the health department.

DUTIES

Helps wherever she is needed in one or more of the clinics.
May prepare babies or children for examination by physician.
May help nurses with immunizations.
May also perform routine office duties – such as filing.

SOME PERSONAL QUALIFICATIONS

A real liking for people.
A willingness to work at various tasks with all kinds of sick people.
Ability to cooperate with supervisors.
A desire to help those who are sick.
18 years of age minimum.

TRAINING

High school graduation.
On-the-job training – length may vary with work location.

Dental
Health
Team

COUNTDOWN TO THE 70's

Study Guide

Program 4: The Dental Health Team

Purpose – The purpose of the program is to demonstrate the activities of various members of the dental health team, including the dentist, dental assistant, dental laboratory technologist, and dental hygienist.

Concept Highlighted – Dental health is a field which offers lifetime opportunity and satisfying work to well-qualified professional people.

Before the Telecast

1. List members of the dental health team and related vocabulary.
2. Collect pictures of workers and equipment with which they work; arrange a display.

During the Telecast

The work of several different members of the dental health team will be discussed and illustrated.

After the Telecast

Discussion:

1. Discuss the work of the dental health team. What were these people actually doing on the job?
2. What similarities did you see in their work? What differences?
3. Are these workers likely to be needed ten years from now? What makes you think so?
4. What kinds of training do you think these people must have? How do you feel about their work?
5. What are some of the aspects of their work that you would like? What would you not like?

Activity:

1. Read supplementary book and report to class.

Related Vocabulary (See Glossary for appropriate definitions):

bridge	denture	filling	oral
crown	exa[illegible]e	job	
decay	extrac[illegible]	medication	

DENTIST

A dentist works in a patient's mouth to preserve teeth, to repair partially destroyed teeth, and to replace lost teeth.

DUTIES

Fills cavities; treats infected gum tissues; extracts teeth.
Takes impressions for dentures and sometimes (rarely) makes dentures.
Does surgical operations on jaw or mouth.
Works with many types of materials — cement, porcelain, silver, etc.
Sometimes applies corrective braces to straighten teeth.
Takes, develops, and interprets x-rays.
Fits and adjusts all types of artificial teeth, bridges, or dentures.

SOME PERSONAL QUALIFICATIONS

Good student (throughout life).
Ability to communicate thoughts as he works with people; courtesy, understanding, and a friendly attitude.
Ability to concentrate on his work; good health and good vision.
Steady hands and nerves; ability to work easily with hands.

TRAINING

High school graduation.
2 or 3 years of pre-dental college training.
4 years training in a professional school of dentistry.

DENTAL HYGIENIST

The dental hygienist assists members of the dental profession in providing o r a l health care. Besides the dentist, she is the only person who is licensed to work directly in patient's mouth.

DUTIES

Scales and polishes teeth; examines and charts defects.
Gives instructions in home care of the teeth, including instruction in methods of tooth brushing and discussion about diet and nutrition.
Takes and develops x-ray films.
Applies medication for reduction of dental decay and takes other preventive measures.

SOME PERSONAL QUALIFICATIONS

Ability and desire to work and get along well with patients.
An interest in health problems of people and in their general welfare.
Willingness to work with all kinds of patients.
Excellent general and dental health.
Good degree of finger and hand movement.
Ability to stand on feet for long periods of time.

TRAINING

High school graduation.
2-year approved course in a technical school or school of dental hygiene.
4 years of college, including two years of college training and two years of professional training.

DENTAL ASSISTANT

The dental assistant assists the dentist as he works with patients, and she usually acts as a receptionist in the dentist's office.

DUTIES

In operating room:
- Seats and places clean napkin on patient, adjusts chair.
- Hands instruments to dentist; mixes cement or other materials for fillings; prepares various solutions and mouth washes.
- Develops x-rays for dentist; sterilizes instruments.
- Other duties may be included.

Receptionist:
- Greets patients; records necessary information; makes appointments.
- Answers telephone; keeps records; performs necessary secretarial duties.
- Orders supplies; takes care of laundry; deals with equipment salesmen.
- Other possible duties.

SOME PERSONAL QUALIFICATIONS

- Poise, self-control, ability to assume responsibility.
- Happy, friendly disposition; alert, accurate, active.
- Ability to work under pressure; a genuine liking for people.

TRAINING

- High school graduation.
- 1- or 2-year approved program in a technical or private school.
- On-the-job training.

DENTAL LABORATORY TECHNOLOGIST

The dental laboratory technologist is a highly skilled worker who makes dentures, teeth, crowns, bridges, and other dental appliances.

DUTIES

- Follows dentist's instructions in his work.
- Forms models from the impressions of patients' mouths taken by dentists.
- Makes metal castings for dentures and metal bridges.
- Polishes and finishes dentures.
- Constructs metal or porcelain crowns or inlays for partially destroyed teeth.
- Performs other duties in connection with producing finished laboratory work for the mouth.

SOME PERSONAL QUALIFICATIONS

- Ability to use small handtools, special electric lathes and drills, high-heat furnaces, and other specialized equipment.
- Patience and a liking for detailed work; artistic ability and good color perception.
- Ability to work quickly and easily with hands.
- Ability to follow instructions and to work at a bench for long hours.

TRAINING

- High school graduation.
- 2-year approved training program at a technical school.
- On-the-job training – 3 to 4 years.

EDUCATION
PART I

SCHOOL PRINCIPAL

The school principal is the person responsible for the overall management, careful supervision and smooth operation of a school.

DUTIES

Visits new teachers or personnel when necessary; or holds conferences in his or her office.
Studies the interests, abilities, talents, experience, and training of teachers and staff personnel.
Conducts all business matters in regard to operation of school and makes decisions when necessary.
May make scheduled or unscheduled visits to the classroom.
Plans and conducts meetings with faculty members; keeps them informed of necessary information regarding school.
Takes part in community activities and promotes interests of school.
Acts as counselor and friend to both students and teachers.

SOME PERSONAL QUALIFICATIONS

Leadership ability and a genuine liking for people.
Ability to express himself accurately and pleasantly.
Dependability, patience, fairness, and a sympathetic nature.

TRAINING

5 years of college with a Master's degree and teaching experience.

TEACHER

A teacher is a person who instructs students in a public or private kindergarten, elementary school, secondary or high school, a technical school, college, university, or any other institution of learning.

DUTIES

Usually works with one group of students during school day (depending on school); may teach special subject or subjects to several groups.
Helps students to learn and develop study skills. Plans classroom work instruction that will stimulate the child's physical, mental, and emotional development.
Sometimes visits children in their homes.
May supervise the cafeteria, bus loading, study halls and other non-academic pupil control responsibilities.
Keeps records of attendance, written work and test grades; makes out report cards; keeps records for state.
May have other related duties.

SOME PERSONAL QUALIFICATIONS

Above average intelligence and a continued desire to learn.
Love of children and an intense interest in their personal development.
Good disposition; patience, tolerance and kindness.
Ability to command respect of others.

TRAINING

High school graduation.
4 years of college with bachelor's degree in education.
Employment as a skilled worker plus a few specific college courses may fulfill the training requirements to become a vocational education teacher.

TEACHER AIDE

The teacher aide assists in performing non-professional classroom activities under the direction and supervision of the classroom teacher.

DUTIES

Maintains attendance records.
Assembles and produces learning materials; performs duties such as typing and duplicating.
Handles audio-visual materials.
Supervises student activities and attends to individual needs of students (takes children to lunchroom, bathroom, etc.).
Duties may vary in schools.

SOME PERSONAL QUALIFICATIONS

Ability to get along with children.
Ability to keep records.
Neat, pleasant appearance.
Honesty, reliability, above average intelligence.
Ability to do clerical work.

TRAINING

High school graduation and/or some college experience.

CUSTODIAN

The custodian is a person who does semi-skilled work in the cleaning, minor maintenance and repair of school buildings, grounds, and related equipment.

DUTIES

Establishes and maintains standards of cleanliness; supervises or takes care of the grounds and buildings.
Opens building and puts building equipment and facilities into operation; adjusts controls (such as on heating).
Makes routine inspections of buildings and grounds; reports conditions he cannot correct.
May sweep, mop, scrub, wax floors; may wash windows, wash and polish woodwork; clean walls and lavoratory fixtures.
Maintains grounds related to building (cut grass, etc.).
Supervises other custodial help; consults with principals, etc., on maintenance and operating problems.
Performs routine maintenance on equipment, lighting, etc.
Work may vary within schools.

SOME PERSONAL QUALIFICATIONS

Knowledge of methods, etc., involved in cleaning buildings and maintaining equipment.
Ability to understand and follow directions.
Good health and ability to do physical manual labor.
Skill in use of tools and other equipment.

TRAINING

Graduation from high school preferred.
Previous experience in custodial work desirable.

CAFETERIA MANAGER

The cafeteria manager is responsible for the work involved in organizing, directing, training, and assisting a staff of workers in the daily preparation of large quantities of food.

DUTIES

Assigns work and assists in food preparation; plans menus; checks conditions of kitchen equipment.
Keeps a record of food supplies on hand.
Prepares and submits various operating reports; prepares orders for food purchases and requisitions government commodities.
Accounts for all money received and paid out; makes bank deposits.
Supervises cooks and helpers.
Related tasks may vary.

SOME PERSONAL QUALIFICATIONS

Ability to organize and direct the work of others, ability to maintain good relations between the cafeteria staff members and students, etc.
Knowledge of and interest in good preparation on a large scale.
Ability to work within a budget and keep accurate records.
A desire to please others.

TRAINING

Graduation from high school.
2 years college study with work in dietetics and home economics; or course in food service management at a technical school; or any equivalent combination of training and experience.

SCHOOL SECRETARY

A secretary, in addition to taking dictation and transcribing, has many routine office tasks. She may have the supervision of other office workers and may perform many duties without instruction.

DUTIES

Operates addressograph, adding, duplicating, or copying machines.
Answers the telephone; performs receptionist's duties.
Types various kinds of items and performs other clerical duties.
Schedules appointments, arranges for hotel reservations.
Talks to parents or children who come in — often handles matters without referring them to the principal.
May have other duties.

SOME PERSONAL QUALIFICATIONS

Ability to type and take dictation rapidly and accurately; knowledge of spelling, punctuation, grammar and vocabulary.
Warm, friendly personality, ability to meet the public and get along well with others.
Ability to work well under pressure.
Neat personal appearance.
A sense of responsibility, dependability and good judgement.

TRAINING

Graduation from high school.
Training may be received in high school business course, secretarial course in a technical school, private business school or a college.

EDUCATION

PART II

COUNSELOR

A counselor helps students understand themselves and the world around them in order that they may make and carry out appropriate decisions relative to education, career, and personal development.

DUTIES

Offers individual and group counseling to pupils and parents.
Assists students through personal, educational, and vocational counseling.
Helps teachers and other members of the school team to obtain, interpret, and utilize appropriate data.
Acquaints students with educational, vocational, and personal-social information.
Helps students find suitable after-school employment.

SOME PERSONAL QUALIFICATIONS

Honesty and sincerity; ability to work with people of all ages; acceptance of each individual and recognition of his worth.
Responsiveness to attitudes and human relationships.
Functional knowledge and skills in counseling procedures.

TRAINING

4 years college with bachelor's degree and teacher's certificate; 1 or 2 years graduate work in guidance-master's degree.
An exceptional ability to communicate with non-college bound students may be used to substitute for a college degree in becoming an occupational specialist.

SCHOOL LIBRARIAN

The school librarian selects and organizes collections of books and other materials and helps readers to use them. He or she works as an assistant and advisor to teachers and plans programs or research projects to meet the needs and interests of children.

DUTIES

Has responsibility for collecting and preparing materials for use. Orders books, types cards and pockets, adds plastic covers, etc. Catalogs and classifies materials.
Works closely with teachers in locating the best available materials for their use, in suggesting materials for specific courses and in aiding in the development of a curriculum; makes all types of materials easily available for classroom use.
Has responsibility for keeping materials in good condition; supervises or cares for the shelving and filing of books and materials.
Other related duties may vary in different libraries.

SOME PERSONAL QUALIFICATIONS

An enthusiastic interest in wide areas of knowledge and in the development and changes in these areas.
Above average intelligence; an eager desire to learn.
A sincere interest in people and ability to work well with others.
An eagerness to search for different kinds of materials and to know how to use them.

TRAINING

Graduation from high school.
4 years of college, bachelor's degree, with specialized study in library science.

LIBRARY AIDE

The library aide performs non-professional activities in a library under the supervision and instruction of a librarian.

DUTIES

Assists in the cataloging and classification of books.
Sorts and files cards for books or other materials.
Fills requests from teachers for audio-visual materials.
Reserves books; issues overdue notices; organizes, circulates, and files magazines.
Helps students and teachers in locating materials.
Assists in shelving books and materials; helps with inventory.
Assists librarian in getting information for reports; performs typing duties.
Performs other related duties.

SOME PERSONAL QUALIFICATIONS

Ability to get along with both adults and children.
Pleasant personality and neat appearance.
Ability to type accurately (typing speed 40 words per minute).
An ability to follow instructions accurately and thoroughly.
An attraction to books and a desire to work with materials.
Ages 18-55.

TRAINING

Graduation from high school and/or college training.
On-the-job training.

BUILDING (MAINTENANCE) MECHANIC

The school building or maintenance mechanic is a person whose work includes the use of several skills in maintaining or supervising the upkeep of buildings, machinery, equipment and grounds. (The mechanic in "Countdown to the 70's" is one of three in this position.)

DUTIES

Repairs or replaces electrical fixtures, wiring, and motors.
Repairs or replaces such items as tile, doors, windows, handrails.
Repairs or replaces parts for water heaters, dishwashers, air conditioners, etc.
Assigns and supervises work of custodial help.
Inspects for proper safety, appearance, and operation of building and equipment.
Maintains or supervises maintenance of school grounds.
Other duties as required.

SOME PERSONAL QUALIFICATIONS

Skill in the use of hand tools.
Dependability and a sense of responsibility; ability to make decisions.
General knowledge of such trades as carpentry, plumbing, electricity, painting, heating and air conditioning.
Ability to work well with others.
Careful attention to details and the ability to interpret work from sketches and written instructions.

TRAINING

Graduation from high school is preferred.
Training in a vocational school or a combination of training and experience.

STATISTICIAN

The statistician performs work that deals with facts p r e s e n t e d in the form of numbers (such as test grades) and studies them to determine special facts or meanings. Example: Work of U.S. Census Bureau.

DUTIES

Helps in the selection of sources for data, methods of collection, and schedules.
Performs any mathematical approach necessary to organize and put facts into correct order.
Operates adding machines, calculators, and sometimes typewriters in compiling reports.
May operate other machines such as those that score tests.
Performs related work as required.

SOME PERSONAL QUALIFICATIONS

Ability to understand complete assignments.
Above average mental ability, along with a special ability to deal easily with numbers.
Imagination in deciding on uses for facts or data.
High degree of accuracy.
Excellent background in math and science.
Ability to express oneself (orally or in writing).

TRAINING

Graduation from high school.
4 years of college training with bachelor's degree in statistics.
Further training required for advanced positions.

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PLUMBER AND PIPEFITTER

A plumber and/or pipefitter installs, repairs and maintains pipes and fixtures used to distribute water, steam, air or other gases and liquids.

A plumber works mainly in residential and commercial buildings. A pipefitter usually works in larger installations, such as factories, missile testing sites, oil refineries, etc. Some personnel work as both plumbers and pipefitters.

DUTIES OF PLUMBER

Installs and repairs sinks, heaters, bathtubs, hot water heaters, dishwashers, etc.
Works on septic tanks and sewers.
Assembles, installs and repairs heating, water, refrigerating and drainage systems.
Other related duties.

DUTIES OF PIPEFITTER

Installs boilers, radiators, stokers, gas furnaces or other heating systems, air conditioning systems, etc.
Lays out, assembles and installs high and low pressure pipes for steam, hot water and other liquids and gases.
Other related duties.

BOTH THE PLUMBER OR PIPEFITTER

Cuts and threads pipes, bends them into desired shape by hand or by machines and joins them by means of welded, brazed, soldered or caulked or threaded joints.
Uses many handtools; hammers, wrenches, chisels, drills, braces, or bits; gas or gasoline torches; welding, soldering and brazing equipment.

SOME PERSONAL QUALIFICATIONS

Ability to get along and work well with all kinds of people.
Physical stamina to endure active, strenuous work, sometimes for long periods of time and often in cramped positions.
Ability to direct work of others.
Willingness to work outdoors at night, at any hour, and on holidays.

TRAINING

High school graduation is preferred.
Apprenticeship training – 5 year program.
10,000 hours of on-the-job training (with pay).
At least 1,080 hours of related classroom study.
Graduation from a recognized vocational training program.

CARPENTER

A carpenter is a workman who builds or repairs wooden structures or their parts.

DUTIES

Erects wooden building frames; builds concrete forms; lays sub-flooring.
Does framing, sheathing, erects partitions, and cuts rafters, etc.
Makes scaffolds and erects temporary buildings on construction sites.
Installs doors and doorframes, windows, molding, wood paneling, cabinets, and hardware.
Lays floors and installs tile, asphalt, linoleum, etc.
Installs wallboard, plywood, and other similar materials.
Uses many tools, such as saws, hammers, chisels, planes, drills, rivets, power tools, etc.
Other related duties.

SOME PERSONAL QUALIFICATIONS

Ability to work with other workers in the building trades as well as with other carpenters.
Physical strength and endurance; ability to work in various positions with ease of body movement.
Good sense of balance; ability to work on high structures without fear.
Patience, accuracy, and pride in his work.

TRAINING

High school graduation is preferred.
Vocational training – 2 year program Or
Apprenticeship training – 4 year program.

AIRCRAFT
MANUFACTURING

ENGINEER

An aeronautical engineer specializes in the design, construction, or testing of aircraft.

There are 30 different college degrees or specialties included in aerospace work, including electronics, electrical, aerospace, chemical, nuclear, mechanical, industrial, and other areas.

DUTIES

Designs all types of aircraft.
Tests models for various characteristics under flight conditions.
May supervise assembly of plane, including installation of engines and other equipment.
Does research that may lead to changes, development and improvement of aircraft or any of its parts.

SOME PERSONAL QUALIFICATIONS

An aptitude in math and sciences.
Accuracy; sound judgment; above average intelligence.
Ability to work with others as part of a team.
Ability to visualize or picture in his mind structures or mechanical operations in three dimensions.
Ability to make clear sketches of things that are hard to understand.
Willingness to work on a job for a long time and to stick with the job until it is finished.

TRAINING

High school graduation with good background in math and sciences.
4 years college with degree in aeronautical engineering or other engineering field.

DRAFTSMAN

The draftsman prepares drawings from sketches or specifications furnished by engineers.

DUTIES

Draws plans or "layouts," giving exact and accurate measurements for the entire object to be built.
Makes drawings of each different view or part shown in the layout, giving exact measurements, quality of materials to be used, and any facts necessary to make the drawing complete in detail.
Examines drawings for errors in figuring or recording the various sizes and specifications.
Corrects and reproduces drawings by tracing them on transparent cloth, paper or plastic film.
Works at large tilted drawing table and uses such instruments as protractors, compasses, triangles, squares, drawing pens and pencils.

SOME PERSONAL QUALIFICATIONS

Ability to work quickly and accurately with hands.
Good vision; natural talent for seeing and comparing shapes, and other forms.
Willingness to work long hours on routine work.
Ability to accept someone else's ideas and to work with them.

TRAINING

Graduation from high school with good background in science, mathematics, mechanical drawing and shop.
2-year program in drafting at a vocational school or college.

FINAL ASSEMBLY WORKER

The assembly worker (shown in "Countdown to the 70's") has the responsibility of putting all the aircraft parts together.

DUTIES

Lays out and locates all the parts of the plane, working from blueprints or other printed orders.
Uses various hand tools such as files, wrenches, rivet sets, as well as powered tools, such as portable drills, riveting and testing equipment.
Knows how to read and apply engineering blueprints, diagrams and production illustrations.
Works with metals used in manufacture of aircraft.
Reworks structures and installations, makes changes of a mechanical nature on plumbing, electrical, controls, and power plant installations.
Performs other duties related to the final assembly of an aircraft.

SOME PERSONAL QUALIFICATIONS

Ability to read blueprints and to follow other types of instructions.
Ability to work on mechanical details with accuracy.
An aptitude and skill in working with the tools necessary for performing the job.
Patience; aptitude in mathematics; ability to work with others.
Perfection in detailed operations.

TRAINING

High school graduation.
Training in a technical school or on-the-job training as that provided for workers shown in "Countdown to the 70's."

BONDED ASSEMBLY WORKER

The bonded assembly worker (shown in "Countdown to the 70's") performs a variety of duties related to putting together aircraft parts by adhesive bondcuring processes.

DUTIES

Studies orders to decide what type of liquid adhesive tape or core-filler to use on parts; applies tape to parts and trims to shape according to the plans or patterns. Also makes metal and paper bond test strips.
Rolls liquid adhesive onto what is called metallic-paper honeycomb core parts before they are bonded or sealed together.
Performs other duties related to the work, including such duties as lifting or holding parts; assisting others; wrapping parts for bonding; drilling holes in parts; cleaning the assemblies.
Wears white gloves at all times to protect material to be handled; gloves must be spotless.

SOME PERSONAL QUALIFICATIONS

Ability to work with others and to follow directions.
Knowledge of methods used on the job.
Accuracy; cleanliness; attention to details.
Ability to use the tools and equipment required on the job.
Good physical health; ability to stand on feet for long hours.

TRAINING

Graduation from high school.
Training in a vocational school or
On-the-job training under supervision.

ELECTRONIC TECHNICIAN

An electronic technician may perform various jobs in the field of electronics. The technician in "Countdown to the 70's" is an electronic systems experimental technician.

Examples of use of electronics in aircraft: to guide and control the movement of the plane; to locate the direction of the flight; to take photographs and fire weapons, etc.

DUTIES

Works in one of a number of jobs in the manufacture of electronic equipment; or
Works in the research and development of new electronic equipment; or
Works in one of a number of jobs in repairing and keeping existing equipment in running order.
Uses tools, machinery, and testing equipment.

SOME PERSONAL QUALIFICATIONS

Above average ability in mathematics.
Ability to work well with others.
Mechanically minded; ability to work well with small tools and with machinery.
A questioning mind and ability to follow through on problem solving.

TRAINING

Graduation from high school with background in mathematics and science.
1 or 2-year program in a technical school, junior college or technical institute; or
On-the-job training 2 years; or
Training in military services.

MICROCIRCUIT FABRICATOR

The microcircuit fabricator constructs and puts together thick film microcircuits, working on equipment and following instructions furnished by engineers.

DUTIES

Fabricates or puts together screens used in the process of screening microcircuits.
Stretches screen material on frames, applies adhesive and cures the frames (which look like small squares of porcelain).
Prints parts of the microcircuit, using techniques similar to those used in photography. Circuits are developed onto screens.
Reads wiring diagrams, assembly blueprints, and other types of instructions.
Uses delicate hand tools and performs work under a microscope.
Performs other duties related to fabricating or constructing the intricately designed microcircuits.

SOME PERSONAL QUALIFICATIONS

Quick hand-eye movement and skill in using small tools to handle tiny objects.
Ability to work with caution and complete accuracy for long periods of time.
Knowledge of procedures and methods used on the job.
Patience; cooperation; alertness; ability to follow instructions accurately.

TRAINING

High school graduation.
On-the-job training – for fabricator shown in "Countdown to the 70's."

CAREERS
IN
BANKING
SAVINGS
ACCOUNTS
HERE

BANK TELLER

The teller is the member of the bank's staff who deals directly with the money that is received and paid out by the bank.

DUTIES

Receives deposits; issues cash for checks.
Distributes and prepares work-up on night deposit bags.
Keeps an up-to-date alphabetical section of the signature card file.
Opens and operates a late window for receiving and paying money.
Does work-ups on transactions made by mail.
Operates business machines, teller changer, teller's adding machine.
Fills out volume report sheets; develops a bond report sheet; keeps a record of window transactions.
Maintains a specific amount of money; turns any excess amount over to head teller.

SOME PERSONAL QUALIFICATIONS

Pleasing personality and ability to deal with the public.
High standard of conduct; good reputation.
Neat and attractive appearance; courteous, patient and tactful nature.
Ability to work under pressure.

TRAINING

Graduation from high school.
On-the-job training (varies with banks).
Previous experience helpful.

LOAN INTERVIEWER

A loan interviewer obtains information necessary for making direct loans and approves or disapproves them.

DUTIES

Interviews applicants who are already customers as well as those who are potential customers.
Makes credit studies and determines whether or not a loan should be approved.
Prepares notes, letters and other papers that may relate to loans.
Checks and records life insurance policies taken as collateral or security for the customer's credit.
Prepares monthly reports.
Reports to the manager of consumer credit in the bank.

SOME PERSONAL QUALIFICATIONS

An interest in other people and the ability to deal with them in a pleasant and cooperative manner.
Ability to conceal matters that are confidential in nature.
Thoroughness, accuracy, and the ability to follow through on details.
Knowledge of all types of loans and the procedures used in handling them.

TRAINING

Graduation from high school.
4 years college with bachelor's degree.
Experience in collection work and other phases of work in the bank precede a promotion to the position of loan interviewer.

LOAN INVESTIGATOR

The loan investigator receives applications for all types of consumer credit loans and gathers and verifies credit information about loan applicants.

DUTIES

Receives applications for loans such as automobile, appliances, check credit, etc.
Gathers credit information on loan applicants.
Contacts other banks, department stores, credit bureaus and finance companies when gathering credit information.
Verifies insurance coverage on auto financing; checks applicant's driving habits and other information pertaining to loan.
Operates Western Union Intrafax Machine.

SOME PERSONAL QUALIFICATIONS

Good background in English, math, spelling, etc.
An inquisitive mind – ability to seek out facts and discover answers.
Skills in operating business machines; general clerical abilities.
Pleasant speaking voice; tact and patience in dealing with others.

TRAINING

Graduation from high school with good English background.
On-the-job training (about 2 months).

BANK KEYPUNCH OPERATOR

The keypunch operator operates a keypunch machine (similar to a typewriter) to transfer information onto data cards by punching holes in places determined by a prepared code.

DUTIES

Punches into data cards certain planned information, using fixed procedures or plans.
Uses keypunch verifier to check out errors. (Verifier is also a machine.)
Uses NCR add punch equipment.
Transfers to another machine in case of breakdown.
Sets up machine for automatic repeated operations such as duplicating, etc.

SOME PERSONAL QUALIFICATIONS

A liking for detailed or routine work.
Willingness to work at one location for long periods of time.
An aptitude for working accurately with machines.
Good hand-eye coordination and ability to use hands easily.
Patience; dependability; pleasing disposition; good vision.

TRAINING

Graduation from high school.
Special training in keypunch operation in a technical or other type school or on the job.

COMPUTER OPERATOR

The computer operator in a bank is responsible for the efficient operation of each job run on the computers.

DUTIES

Reads job-write or description and sees that the proper tapes and forms are used for the run.
Cleans components or parts on the computer; also responsible for cleanliness of operating area.
Reports on any job failure, also notifies the proper authority about the incident.
Keeps up with the time control in order that computer efficiency may be determined.
Handles certain maintenance on the machines.
Other related duties.

SOME PERSONAL QUALIFICATIONS

Knowledge of computers and their operation.
Interest in science and math.
A curiosity about and interest in operation of machinery.
Ability to work accurately in following instructions.
Thoroughness, accuracy, dependability.

TRAINING

Graduation from high school.
Training in computer operation in a technical school, private school, or college.

BANK EMPLOYMENT MANAGER

The bank employment manager (shown in "Countdown to the 70's") recruits, interviews, tests and places new employees, recommends new policies for employment and conducts employee relations program.

DUTIES

Attracts and employs the suitable employees and places them where they can be of the best service to the bank.
Develops a trained staff to assist in interviewing applicants.
Develops recruiting and hiring procedures; recommends improvements or changes.
Counsels with employees; does research concerning better methods of dealing with employees.
Acts as coordinator of bank's recruitment program, including both selected high schools and colleges.
Other related duties.

SOME PERSONAL QUALIFICATIONS

Unquestionable honesty; high moral standards.
Good judge of human behavior.
Initiative, imagination; an enthusiasm for and love of work.
Ability to organize and to work well with all types of people.
Skill in making objective judgments based on information obtained about applicants.
Ability to speak and write well.

TRAINING

Graduation from high school.
4 year college with bachelor's degree; study in management, psychology or personnel work preferred.

"TO MARKET,
TO MARKET
(RETAILING)

SALESPERSON

A salesperson (as shown in "Countdown to the '70's" sells goods or services to customers of a retail business.

DUTIES

Serves each customer courteously and as quickly and efficiently as possible.
Knows the merchandise and advises customers.
Informs manager of merchandise that is not in stock; also tells him about calls for goods not usually kept.
Assists with stock work and helps to keep a stock count.
Works to keep the merchandise and the departmetnt neat and orderly.
Handles cash and charge transactions accurately.

SOME PERSONAL QUALIFICATIONS

Pleasing personality; ability to deal with customers in satisfying way.
Accuracy in handling money and keeping records.
Willingness to stand on feet for long periods.
Understanding of customer's needs and imagination in making useful suggestions.

TRAINING

High school graduation.
On-the-job training; length of time depends on store. Training usually includes some classroom work.

CASHIER

A cashier accepts money paid by customers, makes change when necessary, and gives a receipt for payment. A cashier also handles transactions in which a customer charges the goods or services received.

DUTIES

Uses a machine called a cash register which prints a record of the amount of the sale, and opens a cash drawer when he or she rings up a sale.
Wraps or bags each purchase made by a customer.
Restocks shelves or marks prices on articles.
Performs other duties similar to those of a salesperson.

SOME PERSONAL QUALIFICATIONS

Quick and accurate hand-eye movement in entering sales on cash register.
Pleasant personality and neat appearance.
Good health; ability to sit or stand in same location for long periods of time.
An aptitude for dealing with figures; care in wrapping and handling merchandise.

TRAINING

High school graduation; background in business subjects helpful.
On-the-job training (varies with stores).

FASHION COORDINATOR

The fashion coordinator (as shown in "Countdown to the 70's") plans storewide fashion activities, fabric fashion activities and fashions for displays.

DUTIES

Plans and stages all fashion shows and special fashion events in all departments or in separate departments of the store.
Selects fashions and accessories, such as shoes, gloves, scarfs, jewelry, for display mannequins.
Sets up fashion displays for special events such as flower shows.
Reports to assistant manager about her duties.
Works with the publicity division of the main store or headquarters and plans her activities in close cooperation with other scheduled or special events.

SOME PERSONAL QUALIFICATIONS

Artistic ability; a good sense of color; ability to match colors, fabrics, etc.
Skill in selecting fashions for displays and matching them up with the proper accessories such as shoes, hats, gloves, jewelry, etc.
Ability to work with others and to organize productions such as fashion shows or other activities featuring fashions.
Imagination; enthusiasm; interest in latest developments in styles.

TRAINING

High school graduation.
2 to 4 years of college training with emphasis in fashion design or some related field.

BRANCH DISPLAY SUPERVISOR

The display supervisor is responsible for the arrangement of proper displays in the windows and the interior of the store, as well as all signs used for display purposes.

DUTIES

Plans store displays in cooperation with activities of the main store.
Works with main store in planning window displays.
Places proper signs throughout the store.
Works with all persons involved in a manner that will promote the success of the store's operations.
Makes reports to the assistant branch manager.

SOME PERSONAL QUALIFICATIONS

Good sense of design and an ability to assemble materials that will blend well together.
An ability to organize and to direct the work of others.
Artistic ability; a good sense of arrangement and balance.
Patience; courtesy; creative ability and imagination; desire to promote the store's operation.

TRAINING

High school graduation.
Special training in display design.

DEPARTMENT OR SALES MANAGER

The sales manager is responsible for customer service, maintaining adequate personnel, merchandising, and the successful operation of his department.

DUTIES

Maintains standards in his department that result in good customer service.
Trains, develops, encourages, recognizes and disciplines persons who work in his department.
Keeps a supply of merchandise that will meet customer demands.
Revises and reviews stock with the buyer or person responsible for ordering merchandise needed for customer demands.
Takes care of payroll, supplies, inventory, and other similar matters.
Plans for and schedules personnel to take care of workload.

SOME PERSONAL QUALIFICATIONS

Ability to organize and to direct the work of others.
Patience; good disposition; sympathy; understanding.
Willingness to praise or recognize members of staff for exceptional work.
An aptitude for attention to details.

TRAINING

High school graduation.
2 to 4 years of college training. Degree in business or personnel work desirable.

HEAD OF SALES

The person who is "head of sales" (as shown in "Countdown to the 70's") works directly under a sales manager, performs similar duties, and acts for him when he is not available.

DUTIES

Trains new employees, if trainer or "sponsor" is not available.
Has certain cash register duties; takes care of duties relating to customer service, such as making adjustments and taking care of returned merchandise.
Responsible for arrangement, handling and movement of stock.
Follows up on special orders and repairs for customers.
Assists in keeping an adequate supply of stock on hand at all times.
Other duties relating to smooth operation of department.

SOME PERSONAL QUALIFICATIONS

Ability to understand the needs and desires of customers and have a sincere interest in helping them.
Ability to organize and to work well with employees under his or her supervision.
Pleasant personality; neat appearance; good disposition; tact; courtesy.

TRAINING

High school graduation.
4 years college with degree is preferred.
On-the-job training after employment.

SPONSOR

The sponsor (as shown in "Countdown to the 70's") trains and reports on new salespersons assigned to his or her department.

DUTIES

Trains new employees; presents the store's standards for customer service; inspires employees to serve customers courteously and efficiently.
Establishes standards for housekeeping in the department and sees that they are maintained.
Authorizes customers' bank checks or other transactions which require approval.
Makes suggestions that may improve the sponsor program.

SOME PERSONAL QUALIFICATIONS

An ability to organize one's time, and then to direct the work of others, at the same time inspiring them to do a good job.
Skill in getting ideas across to others.
Energy and initiative; good common sense.
A competitive spirit with a desire to increase sales.

TRAINING

High school graduation.
College training helpful.
On-the-job training in store.

BUYER

The buyer in a department store has the responsibility of purchasing goods for a special department or area in sufficient amounts to take care of the customer's demands. He is also responsible for control and movement of the goods.

DUTIES

Selects and purchases merchandise.
Controls the merchandise inventory; watches stock to see how it sells.
Responsible for markups on goods; also makes markdowns when goods do not sell or returns them to the vendor.
Consults with sales managers in regards to movement of stock.
Budgets work; plans purchases six months in advance of actual needs.
Consults with manufacturers' representatives and keeps up with new additions in the various lines of merchandise.

SOME PERSONAL QUALIFICATIONS

Interest in and knowledge of merchandise.
Energetic; self-confident; imaginative.
Ability to work well with others as he deals with sales staff, salesmen, customers, etc.
Good judgment and ability to make quick decisions.
Ability to make wise buying choices and to select what buying public wants.

TRAINING

High school graduation.
Additional training depends on store. Most stores prefer college training with degree in marketing, economics or related areas.

"TO MARKET, TO MARKET"
CATALOGUE SALES

ENTRY TYPIST

The entry typist (shown in "Countdown to the 70's") types the information shown on a customer's order on special paper that is later entered into the computer.

DUTIES

Uses a special typewriter containing characters and symbols that can be read by the optical scanner before entry into the computer.
Follows a definite schedule or format in typing information.
Uses special steps for correcting typographical errors.
Types information on special white 11" x 14" paper which must be clean and free of wrinkles.

SOME PERSONAL QUALIFICATIONS

Ability to type accurately, with average or above average speed.
Ability to concentrate in noisy areas.
Friendly manner and attractive personality.
Ability to organize work and give attention to details.

TRAINING

High school graduation.
Training in typewriting and other business subjects helpful.
4 weeks training on the job, with supervised work following the training period.

IRREGULARITY CLERK

The irregularity clerk in catalog sales corrects or attempts to correct catalog orders that have been rejected by the computer. The computer automatically rejects an order containing an error.

DUTIES

Receives the incorrect orders from the computer.
Determines what corrections should be made before the order may be reentered into the computer.
Makes a record of the correction on what is called a validation sheet.
Forwards order to proper department if the error cannot be corrected.

SOME PERSONAL QUALIFICATIONS

Ability to use good judgment and make quick decisions.
Careful attention to details and ability to concentrate when surrounded by activity.
Above average intelligence.
Ability to work well with others.

TRAINING

High school graduation.
2 weeks of supervised on-the-job training (for clerk in "Countdown to the 70's").

KEY PUNCH OPERATOR

The key punch operator (shown in "Countdown to the 70's") key punches onto cards and reenters into the computer orders that have been corrected by the irregularity clerk.

DUTIES

Receives hand notated rejections for correction and reentry into the computer.
Uses different key punch formats depending upon the type of correction noted.
Key punches corrections using the proper format.

SOME PERSONAL QUALIFICATIONS

Ability to follow instructions and to follow correct methods for performing the job.
Alert mind; ability to detect errors and handle corrections in the proper way.
Ability to use hands quickly and easily.
Knowledge of key punch machine operation; ability to type.
Ability to work with others.
Neat appearance and pleasant disposition.

ORDER FILLER

The order filler goes into the aisles between the long r o w s of merchandise and selects the article or articles listed on the customer's order.

DUTIES

Receives a certain number of tickets or orders at regular intervals; tickets and merchandise are placed in numerical order.
Pushes a buggy through the aisles, filling each ticket as she reaches the correct merchandise.
Attaches tickets to the merchandise and takes orders to a special location.
Works on a time schedule for each group of orders received.

SOME PERSONAL QUALIFICATIONS

Ability to work well under pressure.
Good health; ability to remain on feet entire day and to work quickly.
Pleasant manner and neat appearance; good disposition.
Ability to follow orders quickly and correctly.

TRAINING

High school graduation.
4 weeks of on-the-job training (for position shown in "Countdown to the 70's").

MIXED ORDER PACKER

The mixed order packer has the responsibility for assembling the articles in a mixed order (merchandise from several departments), matching them up and packing the order properly.

DUTIES

Sorts merchandise by basket number for matching up the orders.
Counts entry tickets for each order and matches them with the invoice (list of goods to be shipped).
Folds, stacks, or arranges merchandise neatly on wrapping paper.
Wraps orders securely, using only materials that are necessary.
Places specific number of orders every 20 minutes.

SOME PERSONAL QUALIFICATIONS

Excellent hand-eye coordination and ability to operate hands quickly and easily.
Good sense of size, shape, and proportion in order to move quickly in assembling and wrapping packages.
Ability to work well under pressure.
Good health; ability to stand on feet during working hours.

TRAINING

High school graduation preferred.
Approximately 4 weeks of supervised on-the-job training.

RECORD CLERK

The record clerk keeps accurate records about the supply of merchandise in stock.

DUTIES

Keeps up to date or maintains a continuing inventory (list of goods on hand), the amount of merchandise received, and the returns or omissions of each item.
Prepares numerous buying reports, passes invoices and other types of records.

SOME PERSONAL QUALIFICATIONS

Above average intelligence.
An aptitude in mathematics and accuracy in working with figures.
Ability to do detailed work for long periods of time.
Ability to organize facts and figures.
Ability to work well under supervision; a genuine liking for other people.
Alert mind; initiative; neat appearance; pleasant disposition.

TRAINING

High school graduation.
6 months of supervised on-the-job training for position shown in "Countdown to the 70's."

THE
TELEPHONE PEOPLE

TELEPHONE OPERATOR

A telephone operator helps persons using telephone services as well as other operators, to place telephone calls and to make telephone connections.

DUTIES OF LONG DISTANCE OR TOLL OPERATOR

Places long distance calls that customers are unable to dial directly.
Connects calls and has responsibility for seeing that they are timed and charged correctly.
Figures charges for each call.
Assists residents in placing calls they cannot reach; also assists operators in other cities with local calls they cannot reach.
Performs some clerical duties.
Sets up conferences for as many as 12 customers, all in a different city or in the same city.
Works with ships, cars, and trucks that have telephone service.

DIRECTORY ASSISTANCE OPERATOR

Locates numbers of local residents that customers are unable to find. Files containing new listings are kept up to date daily.

INTERCEPTING OPERATOR

Interrupts a call to ask number the customer is calling.
Checks a book to determine whether the number has been changed, disconnected, or is not a working number.

SOME PERSONAL QUALIFICATIONS

Ability to use hands quickly and easily (manual dexterity).
Clean and pleasant speaking voice; patience; ability to handle all types of situations politely.
Ability to speak correctly; good eyesight.
Desire to be of service to others.

TRAINING

High school graduation.
3 or 4 weeks of on-the-job training.

SERVICE REPRESENTATIVE

The service representative deals directly with customers about their telephone service.

DUTIES

Takes requests for telephone service and arranges for installation of telephones – makes record of the number, style and color of each.
Notifies accounting department about installation of new telephones or other changes.
Receives customer complaints about service.
Has responsibility of dealing with customers about unpaid bills or discussing questions that may arise concerning bills.
Takes requests for any changes in telephone service.
Prepares orders for typing.

SOME PERSONAL QUALIFICATIONS

Ability to deal pleasantly with all types of people.
Patience; understanding; good judgment.
Clear, firm, and pleasant speaking voice.
Neat, attractive appearance.

TRAINING

High school graduation.
On-the-job training with supervised instruction.
Additional training when new developments are made.

SWITCHMAN

The switchman takes care of the equipment that dials or switches calls from one telephone to another.

DUTIES

Keeps switching equipment in central office in good working order; also maintains automatic message accounting systems.
Checks switches, using special tools and measuring devices.
Locates and repairs trouble spots on customers' lines in the central office.

SOME PERSONAL QUALIFICATIONS

Basic knowledge of principles of electricity and electronics.
A natural mechanical aptitude.
Good physical condition; patience.
Ability to work with others.
Desire to serve others through his performance in this necessary job in a large service organization.

TRAINING

High school graduation.
Vocational training helpful.
Company-sponsored on-the-job training including classroom instruction.
Courses for improving skills offered periodically.

FRAMEWORKER

The frameworker connects wires on the frames or panels where customers' lines come into the central office.

DUTIES

Solders correct wires together at the frame or panel where they enter the central office.
Connects, disconnects or changes a customer's telephone number by changing the wires.
Makes connections according to instructions on a prepaid worksheet.

SOME PERSONAL QUALIFICATIONS

Patience; ability to work with small wires for long periods.
Manual dexterity (ability to work easily with hands).
Some knowledge of the basics of electricity.
Good sense of color.
Excellent physical condition.

TRAINING

High school graduation.
Company-sponsored training including classroom instruction and supervised on-the-job experience.
Periodic related courses.

INSTALLER-REPAIRMAN

A telephone installer-repairman places, services and repairs telephones in homes, offices and other places of business.

DUTIES

Installs and removes telephones in homes and places of business.
Connects newly installed telephones to the outside service wires on buildings or poles; climbs poles to make the connections.
Travels to homes and offices in trucks equipped with necessary tools and supplies.
Tests, locates and repairs trouble or customers' telephones in order to restore service.

SOME PERSONAL QUALIFICATIONS

Mechanical ability; background in mathematics and physics.
Ability to use hands quickly and easily.
Neat appearance and pleasant personality.
Ability to deal with all types of people.

TRAINING

High school graduation is preferred.
On-the-job training with supervised instruction.
Short courses at a recognized institution.
Continued study throughout career as new changes and developments take place.

TELEPHONE LINEMAN AND CABLE SPLICER

The lineman places cables and wires on telephone poles or in underground c o n d u i t s (pipes or tubes) leading from the central office to customers' homes. The c a b l e splicer completes the connections by joining the cables correctly.

DUTIES OF LINEMAN

Digs holes and erects poles that support the cables.
Climbs poles and installs the cable equipment, usually leaving the ends of wires for cable splicers to connect.
Places cables in underground conduits (pipes or tubes).
Repairs and maintains existing lines; often makes emergency repairs.

DUTIES OF CABLE SPLICER

Completes connections of wires or cables left by lineman.
Works on high platforms, in manholes, or in basements of large buildings.
Connects wires by matching colors to insure an unbroken connection between central office and customer's telephone.
Rearranges wires when lines are changed.
Maintains and repairs cables.

SOME PERSONAL QUALIFICATIONS

Good physical condition; desire to work outdoors and on high places.
Manual dexterity (ability to work easily with hands.)
Ability to distinguish colors of wires easily.
Some knowledge of the basic principles of electricity.

TRAINING

High school graduation is preferred.
Company training program includes classroom and on-the-job instruction.
Additional periodic training in related courses.

ELECTRICAL ENGINEER

An electrical engineer designs, develops, or supervises the manufacture of electrical and electronic equipment.

DUTIES

Specializes in one general area of work — electronics, electrical equipment manufacturing, communications, or power. (Engineer on "Countdown to the 70's" works in area of communications.)
Designs and plans for installation of switching systems and transmission systems.
Sees that buildings are planned so that they will adequately take care of new and existing equipment for communications.
Makes studies of plans that are designed to determine one that best fills the needs.

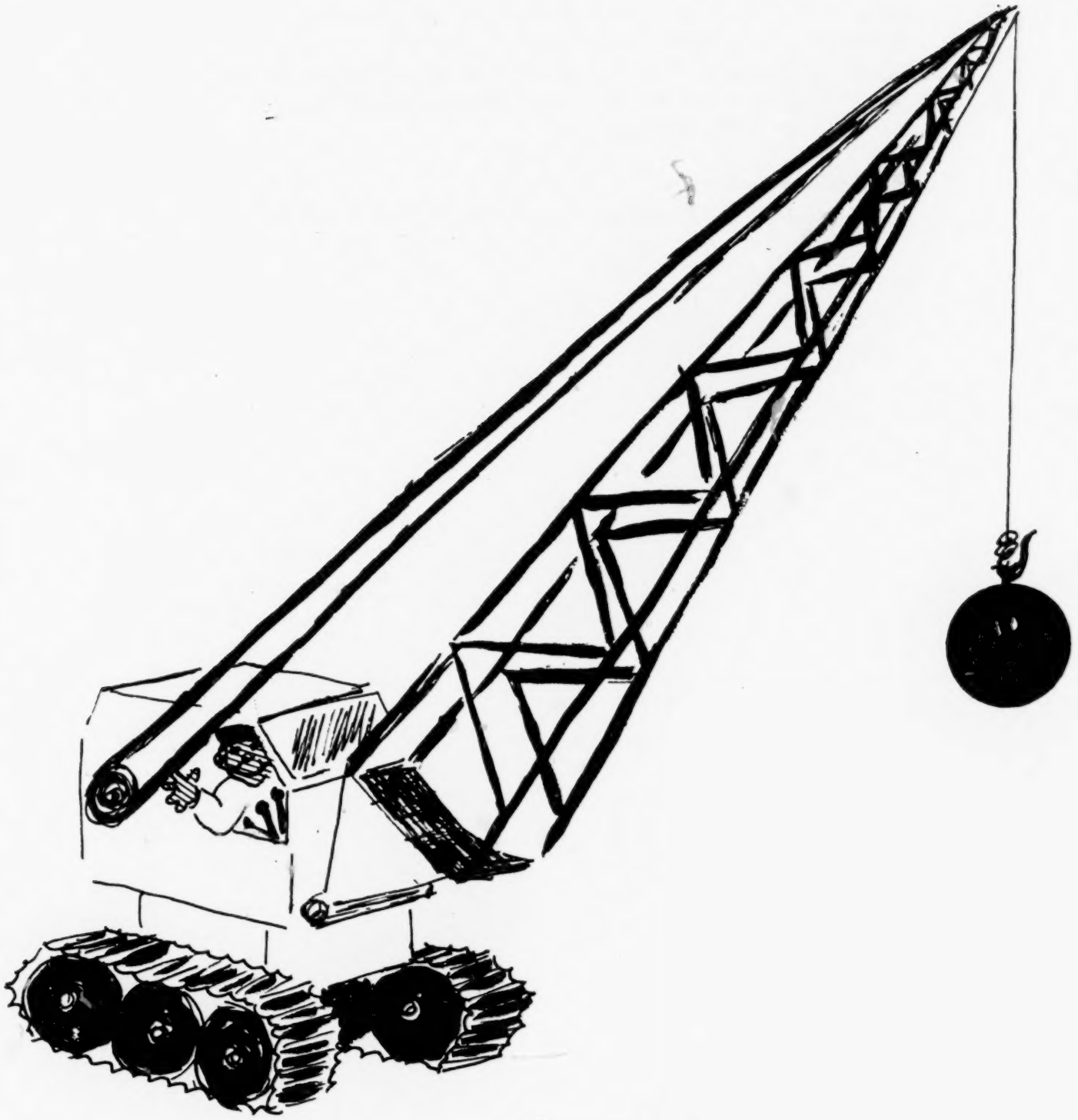
SOME PERSONAL QUALIFICATIONS

Interest and aptitude in the sciences and mathematics.
Ability to communicate well both verbally and in writing.
Accuracy; good judgment; honesty.
Ability to visualize structures or mechanical operations in three dimensions.
Ability to make clear sketches of complicated operations and ability to explain ideas in simple language.

TRAINING

High school graduation.
Bachelor's Degree in Engineering — 4 or 5 years of college.

The Builders (Coristruction)



PROJECT ENGINEER

The project engineer (in "Countdown to the 70's") organizes the various activities on a construction job so that the operation will work smoothly and efficiently.

DUTIES

Establishes and maintains good relations with the architects, owners, inspectors of various kinds, subcontractors, the unions, and the public in general.
Makes plans for a smooth and orderly operation of all activities on a job.
Relieves the superintendent of various duties so that he can concentrate on construction.
Makes necessary reports, including cost statements and any reports required by architects, owners, etc.
Handles necessary correspondence.
Performs other related duties.

SOME PERSONAL QUALIFICATIONS

Above average intelligence; knowledge of engineering.
Patience; pleasing personality; ability to supervise and work well with others.
Ability to speak and to give orders that are easily understood.
Ability to organize or arrange the various job activities in proper order.

TRAINING

High school graduation.
4 or 5 years college with degree in engineering is preferred.

CRANE OPERATOR (OPERATING ENGINEER)

A crane operator uses a heavy power-driven crane, usually in work that is connected with the construction industry.

DUTIES

Uses various pedals and levers to rotate crane on its chassis (body) and to raise and lower the crane boom (long arm) and the loadline.
Uses and operates a number of different attachments to the crane boom such as shovels, workbuckets, pile drivers, and wrecking balls.
Handles buckets or scoops for excavating (digging out and removing dirt).
Uses pile drivers to drive steel beams, wood, and concrete piling into the ground.
Uses wrecking balls for tearing down old buildings, etc.

SOME PERSONAL QUALIFICATIONS

Skill in handling heavy equipment.
Ability to use good eye-hand-foot movement.
Judgment in estimating sizes, shapes, and amounts.
Mechanical aptitude; good judgment.
Ability to take his work seriously.
Good physical condition; ability to stand dirt, noise, all types of weather conditions.

TRAINING

High school graduation.
Union apprenticeship training (3 to 4 years).
— or —
On-the-job training.

IRON WORKER

An iron worker erects, puts together, or installs metal products in the construction of industrial, commercial, and large residential buildings.

DUTIES

Joins steel elements or parts by riveting, bolting, or welding.
Erects steel framework used in construction of bridges, buildings, and other structures such as metal storage tanks.
Installs steel floors, doors, safes, and vaults.
Hoists or lifts steel shapes into their proper places and connects the steelwork that has been assembled.
Follows closely the architect's blueprints.
May perform other activities.

SOME PERSONAL QUALIFICATIONS

Ability to work under all kinds of weather conditions and to stand constant loud noises.
Excellent physical condition, with ability to climb, reach, kneel, stoop, etc.
Normal vision; exactness or accuracy in checking details.
Ability to cooperate and work well with other people.
Willingness to take risks and to work at high altitudes; good sense of balance.

TRAINING

High school graduation.
Apprenticeship training (about 3 years of on-the-job and classroom training).

CARPENTER

A carpenter does construction and repair work involving the cutting, shaping, and fastening of wood or other materials.

DUTIES

Erects wooden building frames; builds concrete form; lays subflooring.
Does framing, sheathing, partitions, rafters, etc. (Sheathing is the first covering of boards on a house).
Makes scaffolds and erects temporary buildings on construction sites. (A scaffold is a temporary framework on which workers stand while they work.)
Installs doors and doorframes, windows, molding, wood paneling, cabinets, and hardware.
Lays floors and installs tile, asphalt, linoleum, carpets, etc.
Installs wallboard; plywood, and other similar materials.
Uses many tools, such as saws, hammers, chisels, planes, drills, rivets, power tools, etc.

SOME PERSONAL QUALIFICATIONS

Ability to work along with other workers in the building trades.
Physical strength and the power to work under sometimes difficult conditions; ability to work in various positions with ease of body movement.
Good sense of balance; ability to work on high structures without fear.
Patience, accuracy, pride in his work.

TRAINING

High school graduation is preferred with good background in arithmetic.
Vocational training – 2 year program or
Apprenticeship training – 4 year program.

CARPENTER'S ASSISTANT AND LABORER

A carpenter's assistant (or laborer) has been called the carpenter's "right-hand man." He assists the carpenter directly or performs other tasks necessary for the successful operation of the job.

DUTIES

Assists carpenter by supplying him with materials, equipment, and other aids to construction.
Assists in pouring and placing concrete; sometimes mixes concrete.
Helps in rough finishing of concrete, a duty that requires skill.
May run vibrators when concrete is poured. (Vibrators keep concrete moving so that it will not harden.)
Places equipment and materials in proper locations.
Handles various types of machinery and operates wheelbarrows and various tools.
Also performs a variety of jobs necessary in building or construction that are directly connected with the work of a carpenter.

SOME PERSONAL QUALIFICATIONS

Ability to work well with others and to follow instructions.
Willingness to work in all types of weather conditions.
Ability to work in high places when necessary.
A sense of pride in good performance on the job.
Ability to realize the need or necessity for doing this kind of work.

TRAINING

High school vocational training preferred.
Experience or on-the-job training.

Air Transportation

AIRLINE PILOT

The airplane pilot operates the controls and performs operations necessary to get the plane into the air, keep it on the right course, and land it safely. He may transport mail, passengers or freight for commercial purposes.

DUTIES

Checks weather conditions, etc; prepares flight plan.
Before takeoff, checks operation of engines and the working of instruments, controls, electrical systems, etc.
Supervises and gives orders to the crew.
Reports to ground control stations about flight details (weather, etc.) during flight.
Watches the many instruments closely during flight, checking the amount of fuel, conditions of engines, landing gear, etc.
Completes flight report and files record of trip in the airline's office.

SOME PERSONAL QUALIFICATIONS

Must be 23 years old and have 1,200 hours of flying time to be a transport pilot.
Ability to take on responsibility and to make quick decisions with accurate judgment; ability to perform under pressure.
Normal vision; excellent physical condition.
Willingness to work irregular hours and to be away from home a great deal.

TRAINING

High school graduation.
Basic pilot's training in military service or in private flying schools approved by FAA; must pass test given by Federal Aeronautics Administration.
Some airlines require college graduation or at least 2 years of college training.

AIRLINE STEWARDESS

An airline stewardess performs services for passengers to help make their flight safe, comfortable and enjoyable.

DUTIES

Checks to see that flight supplies such as emergency life jackets and other safety equipment, and food and beverages are on board the plane and in the proper place.
Welcomes passengers and checks passengers' tickets.
Gives instructions about safety at the beginning of flight.
Heats and serves meals that have been precooked; also serves beverages during flight.
Completes the necessary passenger flight reports.

SOME PERSONAL QUALIFICATIONS

Usually (not always) must be 20 to 27 years old, 5 feet 2 inches to 5 feet 9 inches, with weight in proportion to height.
Attractive, courteous, and friendly; good physical health.
Ability to get along with and understand all types of people; good judgment in case of emergency.

TRAINING

High school graduation. Some college training preferred.
On-the-job training (may vary with airlines).
Training in foreign languages for international flights.

RAMP AGENT

The ramp agent performs nonmechanical duties in connection with the operation and servicing of aircraft while on the ground.

DUTIES

Loads and unloads cargo, baggage, mail and freight.
Handles cargo as it moves between planes, hangars, mail or freight rooms, baggage rooms, or field ticket counters.
Handles baggage carts and other ground handling equipment.
May handle fire extinguishers, fuel trucks and equipment, etc.
May perform some of these duties or other duties related to the preparation of aircraft for flight.

SOME PERSONAL QUALIFICATIONS

Ability to do heavy manual work; excellent physical condition.
Ability to follow instructions and work well with others.
Possession of a driver's license.
Willingness to work on rotating shifts (day or night) under all kinds of weather conditions.

TRAINING

High school graduation.

AIRPLANE MECHANIC

An airplane mechanic inspects, services, repairs, and overhauls aircraft.

DUTIES

May be licensed as an "airframe mechanic" to work on the plane's fuselage (main body portion), wings, landing gear, flight controls and parts that are not part of the engine, propeller, or instruments.
May be licensed as a "power plant mechanic" to work on the plane's engines.
May be both "airframe and power plant mechanic" and work on all parts of the plane.
May be "repairman" and work on special repair jobs.
May use many kinds of tools — hand tools, propeller grinding machines, electrical circuit testers, etc.

SOME PERSONAL QUALIFICATIONS

Ability to work quickly and meet strict and exacting standards.
Good physical condition; ability to climb and work on scaffolding when required.
Willingness to work day or night on locations where work rotates on 8-hour shifts.

TRAINING

High school graduation.
2-year training program at a technical school, junior college, college, or by Federal Aviation Agency.

— or —

Apprenticeship or on-the-job training program (3 to 5 years).

RESERVATIONIST

The reservationist (male or female) is responsible for selling the services of the airline and for promoting good will through courteous, prompt, and efficient service.

DUTIES

Receives incoming calls about reservations, etc.
Makes outgoing calls pertaining to reservations, flight information, confirmation of space held by customers, and related matters.
May obtain and furnish information for reservations to other countries, including the necessary documents such as passports, citizenship requirements, reason for travel, etc.
Attempts to sell roundtrip tickets and other specialties of the airline.
Consults computers, records, or other airlines to make reservations and to request or furnish passenger and flight information.
Posts or files information about reservations made.
Performs other related duties.

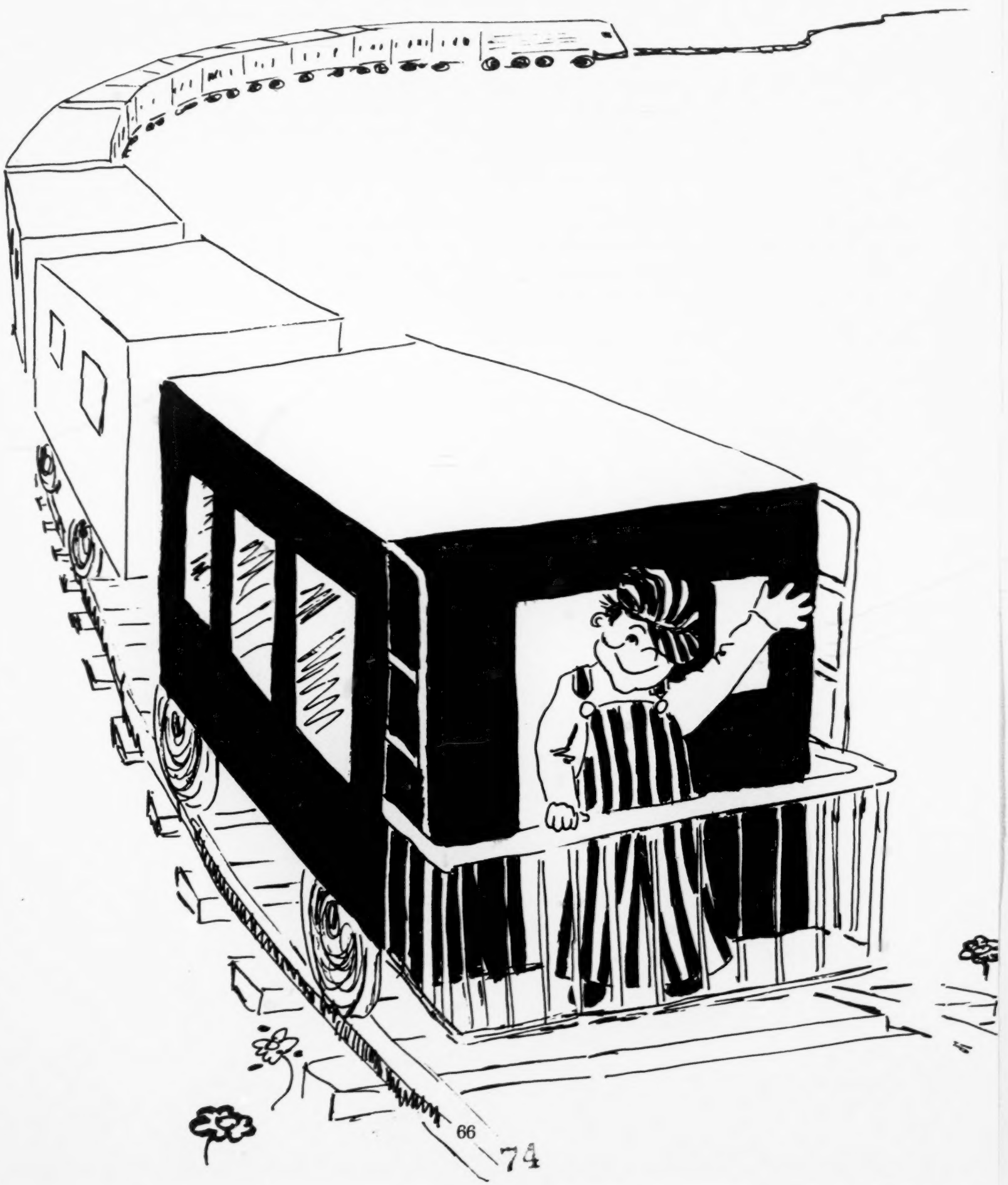
SOME PERSONAL QUALIFICATIONS

Courteous, tactful, mature, friendly.
Pleasant speaking voice; good vocabulary and dictation; good judgment.
Ability to print well; accurate and efficient.
Ability to work well under pressure and to sit for long periods of time.

TRAINING

High school graduation.
In some instances, the physically handicapped may be employed.

Careers in Rail Transportation



LOCOMOTIVE ENGINEER

The locomotive engineer runs a locomotive on a railroad and is responsible for operating it safely and efficiently.

DUTIES

Works on the road in passenger or freight service or in the railroad yards.
Operates the throttle, air brakes, and other parts of engines; knows how to reduce speed gradually for safety of passengers.
Checks various controls and materials such as gauges, dials and fuel, sand, water, etc.
Supervises work of fireman (helper).
Checks on condition of locomotive before and after each trip.
Observes track signals and complies with speed regulations at all hours and in all weather conditions.
Contacts dispatcher and other crew members by radio.

SOME PERSONAL QUALIFICATIONS

Good health and normal vision and hearing.
Mechanical ability and knowledge of simple tools.
Understanding of engines and willingness to study and keep up with new developments.
Willingness to work at irregular hours.

TRAINING

Engineers usually promoted from the position of fireman. Must have thorough knowledge of locomotives, their operation, the operating rules, and the territory over which he will travel. Must pass examinations. Begins as an "extra man." May take several years to become regular engineer.

RAILROAD CONDUCTOR

The railroad conducter is the leader of the crew that operates the train; he is responsible for the safety of the passengers and cargoes and for seeing that train orders are carried out.

DUTIES

Follows orders issued by dispatcher or yardmaster and directs his crew accordingly.
Complies with operating rules at all times and promotes safe operation by members of the crew.
Keeps in touch with the engineer and with stations and other trains by radio.
Keeps train on schedule and tries to avoid delays.
Flags or gives signals at crossings over highways in order to protect pedestrians, moving vehicles or other railroad equipment.
Supervises picking up or letting off cars at stations along the route.

SOME PERSONAL QUALIFICATIONS

Willingness to work outside in all kinds of weather and on rotating shifts.
Good physical condition; normal vision.
Alertness and good judgment; ability to work under pressure.
A liking for people and ability to get along with all types of individuals; ability to manage and give orders.

TRAINING

High school graduation.
Previous railroad experience.
Promotion from brakeman or other job to conducter.

CARMAN

The carman is employed by the railroad to make regular inspections of the different parts of a train in order to insure its safe, efficient operation.

DUTIES

Checks operation of train at each major stop.
Inspects train in the yards; connects air hose between each car and applies brakes to be sure that brakes are operating on each car; inspects the brakes for proper release.
Checks running gear to be sure it is not loose or dragging; checks for proper loading and bracing.
Checks oil and position of parts.
Fixes car if time permits; if not, advises officer to have car removed to repair track.
Performs other related duties.

SOME PERSONAL QUALIFICATIONS

Must be willing to work in train yards in all types of weather conditions.
Excellent health; normal eyesight and good hearing.
Willingness to work at any hours of night or day; ability to take orders and work with others.

TRAINING

High school graduation.
Apprenticeship training, usually 4 years.
Short periods of on-the-job training before being placed in the yards.

CAR LOCATOR

The car locator, by using equipment that is tied in with computers, can find out the exact location of any car and tell the approximate time it will arrive at its destination.

DUTIES

Operates a machine similar to a typewriter.
Works with equipment connected with computers in which the location of all cars are stored. (The information is updated as cars move from station to station.)
Types number of the car to be located into the machine and in a few seconds the machine types the last location of the car that was stored in the computer.
Furnishes by telephone the information which helps shipper or receiver to determine the approximate arrival time of the car or cars.

SOME PERSONAL QUALIFICATIONS

Pleasant speaking voice and the ability to handle information by telephone.
Willingness to work indoors and sit in one position for long periods of time.
Knowledge of the equipment and correct steps to take in using the machine.

TRAINING

High school graduation.

SALES REPRESENTATIVE

The sales representative sells the services of the railroad to future customers and acts as a contact man for shippers who use these services.

DUTIES

Learns the rates for transporting goods from one location to another and knows about best routes available.
Has knowledge of good packaging methods.
Calls on regular shippers to find out if satisfactory rail service is being provided; attempts to sell additional services whenever possible.
Calls on prospective customers; advises them of advantages of services offered by railroad.
Checks on any problem that may develop.
Works closely with shippers and services their account.

SOME PERSONAL QUALIFICATIONS

Willingness to travel to various parts of the country and to be away for long periods.
Aptitude for selling; ability to persuade or convince others.
Dependability; desire to be of service to others.
Genuine liking for people and ability to communicate.

TRAINING

High school graduation.
College degree preferred.

Transportation in Our Town

BUS DRIVER

The bus driver (shown in "Countdown to the 70's") drives buses from one city to another along a planned route and according to special time schedules.

DUTIES

Picks up and discharges passengers at terminals and other points along his route.
Inspects the bus carefully to be sure of its safe operating condition and checks for the necessary safety equipment.
Collects tickets, cash, or other forms of payment from passengers as they board the bus.
Announces the name of the next stop before departure and upon arrival at the stop; announces changes to be made.
Supervises loading and unloading of baggage; checks loading plan for easy unloading; sees that passengers get their baggage.
Makes report of each trip, including number of passengers carried, mileage, time, etc.; turns tickets and collections over to the proper person.
Performs other related duties.

SOME PERSONAL QUALIFICATIONS

A feeling of pride in his work and a desire to drive his bus safely.
Good health, with normal vision and hearing and good heart condition.
A liking for people and the ability to deal with them pleasantly.
Willingness to work unusual hours in all kinds of weather conditions.
An understanding of the necessity for defensive driving at all times; a willingness to improve driving habits.

TRAINING

High school graduation.
24 to 35 years of age (when employed).
Company training program — 1 to 2 months (varies with company).

TELEPHONE INFORMATION CLERK

The telephone information clerk gives out various kinds of information requested by telephone.

DUTIES

Gives information pertaining to bus schedules and fares.
Directs questions, when necessary, to the person or department that can supply information requested.
Learns as much as possible about tickets, tariffs, geographical tools such as maps, etc., in order to give best information possible.
Gives information to customers about charters, tours, and express, or directs customer to proper departments.
Maintains an up-to-date Rolodex, keeping all tariffs current. (A Rolodex is a revolving card file in which cards are attached to a cylinder and can be easily removed or replaced.)

SOME PERSONAL QUALIFICATIONS

Pleasant speaking voice; courteous, friendly personality.
Businesslike manner; desire to be of service to others.
Ability to organize information and to remember details.
Accuracy and dependability.

TRAINING

High school graduation.

SPECIAL MARKETING SUPERVISOR

The special marketing supervisor directs work involving marketing and customer service, following the plans approved by the bus lines.

DUTIES

Promotes the sale of regular tickets also chartered tours, special operations, local and international tours, and package express (usually in a special area).
Supervises various services to customers such as those of the telephone information, ticket counter, baggage, and express departments.
Supervises work of persons in the charter and travel bureau.
Makes suggestions to improve the sales of service; suggests changes in rates, routes, schedules, tariffs, rules, etc.
Supervises the selection, training, and organization of all commission agents in an area.
Makes reports to the regional marketing manager.
Many other related duties that involve establishing a smooth operation to meet the customers' needs.

SOME PERSONAL QUALIFICATIONS

Broad knowledge of assigned area and activities it involves.
Ability to organize and work well with others.
Good judgment of human nature and ability to make wise selections.
Friendly, agreeable manner; sales ability; desire for accomplishment.

TRAINING

High school graduation.
At least 2 years of training beyond high school preferred.

BAGGAGE SUPERVISOR

The baggage supervisor is responsible for the smooth operation of all activities connected with the handling of baggage in the bus station.

DUTIES

Assists in making plans for handling of baggage, placement of baggage, classification and assignment of baggage areas, etc.
Helps in preparation of material for use in educational programs to train baggage employees.
Processes and traces claims for loss, damage, theft, delay of baggage or any unusual claims involving legal action.
Assists in preparing baggage manuals that outline steps for the proper handling of baggage.
Assists in the selection and training of employees for the terminal.

SOME PERSONAL QUALIFICATIONS

Ability to supervise and work well with others; good disposition.
Sincere desire to be of service to others.
Willingness to make changes in order to improve service.
Good judgment of human nature.

TRAINING

High school graduation.

TAXI DRIVER

The taxi driver takes passengers from one place to another in a motor vehicle.

DUTIES

Drives people from one place to another, collecting fares that are usually based on the length of the trip recorded on a meter.
Gets orders for picking up passengers over a two-way radio system; also picks up passengers while returning to a stand or station; picks up customers waiting at hotels, railroad and bus stations, etc.
Sometimes picks up and delivers packages.
May be asked to provide sight-seeing tours.
Keeps taxi clean, unless the company provides this service.
Keeps a log or record of all pickups, including the time, place, destination, and the amount of fare collected for each.
May perform other services such as handling luggage.

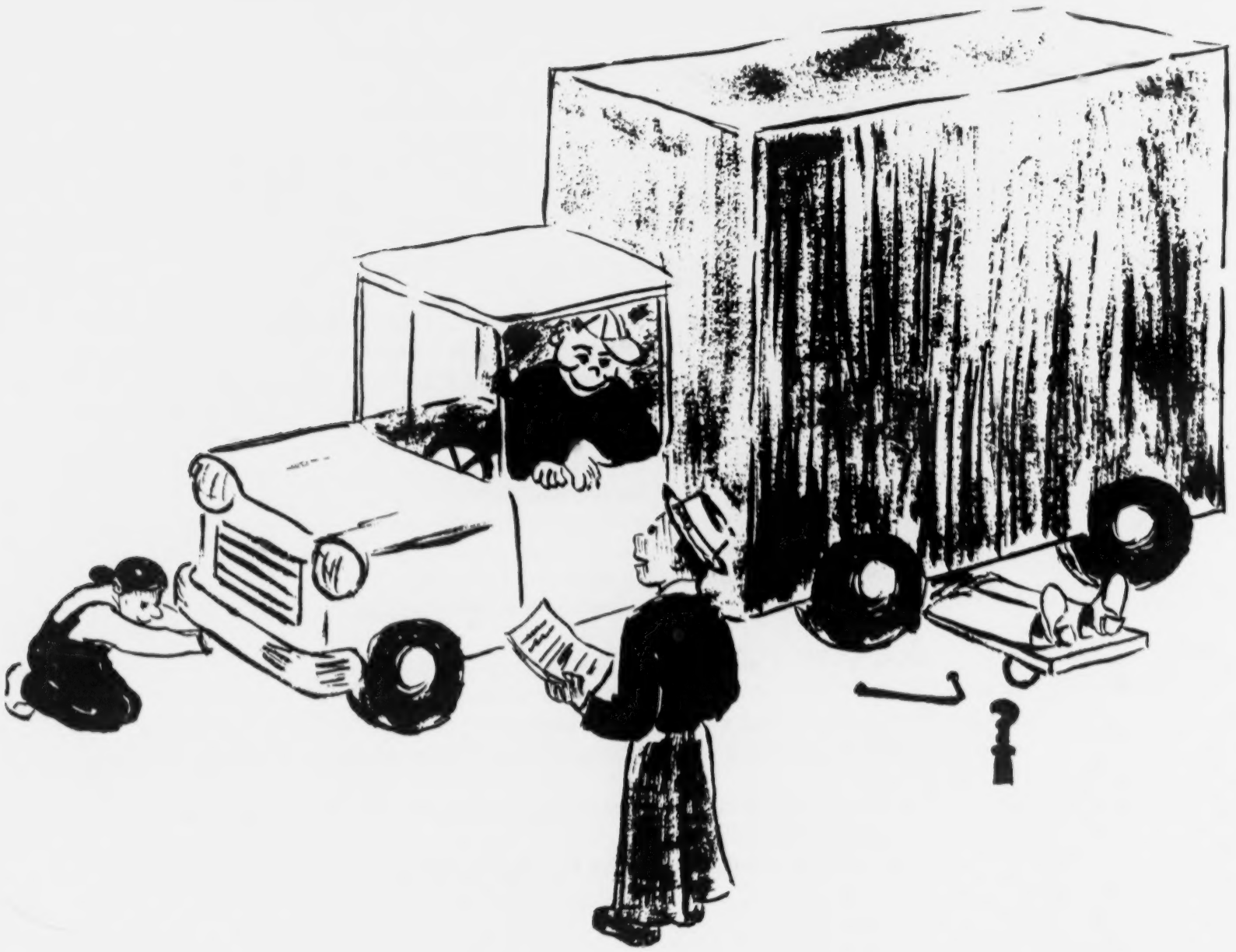
SOME PERSONAL QUALIFICATIONS

Good health, a good driving record, and no criminal record.
Willingness to work long hours in all kinds of weather.
Steady nerves and a calm, even disposition.
Ability to get along with all types of people; a desire to be of service to others.

TRAINING

No formal education required. Some companies require at least an eighth-grade education.
Must pass rigid test required by the city to obtain necessary operator's license.

The Highway Men



TRUCK DRIVER

The truck driver (in "Countdown to the 70's") hauls goods and materials in gasoline or diesel trucks or tractor-trailers.

DUTIES

Delivers freight to customers, checking each bill to be sure that the shipment is correct.
Picks up freight, checking carefully for the right amount or number of pieces.
Fills out driver's trip card, showing mileage and number of stops made; keeps a record of daily activities.
Collects freight charges when due and makes collection returns to cashier.
Calls dispatcher when goods are unloaded; receives instructions for his next pickup.
Inspects truck before and after trip, making report on condition.
May drive at night, sometimes does his own unloading.
Drives not more than 10 hours in a 15-hour period then has 8 hours off.

SOME PERSONAL QUALIFICATIONS

Ability to judge distances accurately and to operate truck in close places; skill in handling trucks.
Constant awareness of good safety methods.
Ability to stay awake under uninteresting driving conditions and to withstand tension.
Good judgment and a sense of responsibility; good health.

TRAINING

High school graduation is preferred.
Specialized training at a vocational school.
Special on-the-job training.

TRUCK MECHANIC

The truck mechanic repairs and maintains trucks owned or operated by the trucking company. He may be an automotive or diesel mechanic.

DUTIES

Inspects truck before it goes on the road.
Keeps engines in proper running condition; changes oil; lubricates; cleans air and oil filters; checks water cooling system; changes and repairs tires, etc.
Locates the cause of mechanical failure and makes necessary repair; removes, replaces, and adjusts parts when necessary.
Rebuilds engines and other parts when necessary.
Overhauls or repairs entire truck, if needed.

SOME PERSONAL QUALIFICATIONS

Good physical condition; ability to work in various body positions.
Average intelligence and mechanical aptitude.
Accuracy and dependability; an aptitude for solving problems.
Pride in doing a job well; a sense of responsibility.

TRAINING

High school graduation is preferred.
Apprenticeship training (3 to 4 years) as a mechanic or 2-year program in a technical school.
Continuous study to learn about new developments.

FREIGHT CHECKER (WAREHOUSE MAN)

The freight checker checks freight as it is being loaded and unloaded and also assists in loading and unloading.

DUTIES

Loads and unloads freight, separating it according to the directions or bills that accompany the freight.
Checks freight for correct number of pieces and reports on any shortage or excess amount.
Makes reports on freight that has been damaged.
Stacks freight carefully; handles heavy freight with a power lift, lifting it in a manner that will avoid damages.
Handles dangerous articles (radioactive materials, poison gas, etc.) in a safe manner.

SOME PERSONAL QUALIFICATIONS

Excellent physical condition and ability to move heavy articles in a safe, easy manner.
Good size and shape judgment in arranging freight and packages in trucks.
Ability to detect defects in freight quickly and easily.
Willingness to do strenuous work for long periods of time.
A feeling of pride in doing his work.
Ability to work well with others.

TRAINING

High school education preferred.
Short period of on-the-job training usually given by trucking companies.

SAFETY SUPERVISOR

The safety supervisor is responsible for the supervision of all safety features related to the trucking lines, the equipment used, the drivers, etc.

DUTIES

Assists terminal managers in the proper selection and training of drivers and dockmen.
Checks the safety habits of drivers and dockmen.
Conducts employee meetings at which such subjects as winter driving, freeway driving, etc., will be covered.
Assists in the investigation and settlement of accidents.
Makes periodic safety checks of all trucks, tractors, and trailers.
Inspects terminals for cleanliness, fire hazards, and all safety features.
Checks out unsafe routes and highways and informs drivers.
Establishes and keeps good relations with the public, including local and state police and other officials.
Many other related duties.

SOME PERSONAL QUALIFICATIONS

High degree of responsibility and special attention to details.
Ability to get along with others; pleasant, but businesslike manner.
Ability to organize work and to speak so that others will understand.
Willingness to be away from home for duties at various points in an assigned area.

TRAINING

High school graduation.
College degree preferred.
Periodic courses after employment.

MOTOR CARRIER SALESMAN

The motor carrier salesman has the responsibility of selling the services of his trucking firm to customers and potential customers in his assigned territory.

DUTIES

Sells the services of his motor carrier firm to customers and prospective customers.
Learns as much as possible about the background of his customers, the type product manufactured, raw materials needed, distribution patterns, etc.
Plans visits to customers, schedules appointments, makes travel plans, etc.
Does his best to effectively represent his company.
Studies activities of other companies in order to better meet competition.
Knows how to recommend the type of equipment and carrier needed for transportation.

SOME PERSONAL QUALIFICATIONS

Neat appearance and pleasant disposition.
Sincere interest in other people and a desire to serve them.
A keen, alert mind that enables him to obtain a broad knowledge about his customers.
A strong desire to sell his firm and its services.

TRAINING

High school graduation.
College degree preferred.

RATE CLERK

The rate clerk determines the rates on shipping various goods and commodities from one city or place to another.

DUTIES

Determines the rates to apply, using tariffs and rules filed with the Interstate Commerce Commission.
Figures charges on shipments after the correct rates have been determined.
Inspects freight to see that it is correctly described and classified.
Figures charges for each carrier or driver in cases where freight will be handled by more than one carrier.
Assists customers by quoting rates and giving information about available routes; gives advice about shipping requirements and procedures.
Supervises billing clerks to be sure that waybills contain correct freight charges and routes.

SOME PERSONAL QUALIFICATIONS

Neat, attractive appearance; good physical condition.
Sincere interest in his work.
Ability to understand tariff language and figures.
Good reputation; ability to organize and to supervise the work of other people.

TRAINING

High school graduation.
Completion of recognized course in tariff management.
Training in use of office machines.

Careers in the Petroleum Industry

SERVICE STATION MANAGER/DEALER

The service station manager/dealer is responsible for the management of all departments of sales, personnel, and the general operation of the service station.

DUTIES

Maintains standards of appearance, service, and workmanship that result in customer satisfaction.
Interviews, selects, trains, and supervises members of his staff, assigning duties to each.
Keeps up with the wage scale and working hours of all employees.
Purchases the amount of supplies, merchandise, and equipment necessary to take care of customers' needs and insure a smooth operation.
Records and manages all money and merchandise that passes through the station's business operations.

SOME PERSONAL QUALIFICATIONS

Ability to organize merchandise and manage money.
Desire for business success and for employee development.
Willingness to spend the time and effort necessary for successful management and growth of his business.
Friendly, pleasing personality, with strong liking for people and a desire to serve them.

TRAINING

High school graduation preferred.
Service Station Business Management course including: financial management, sales management and promotion, personnel management; basic motor tune-up, and other automotive services.

SERVICE STATION ATTENDANT (DRIVEWAY SALESMAN)

The driveway salesman performs services for customers at the gasoline pump island or on the driveway of the service station.

DUTIES

Supplies cars or trucks with gasoline, oil, water; checks batteries, oil, etc.; cleans windshields and vacuums car's interior; checks tires and puts air in tires when necessary.
Suggests purchase of items as they are needed such as oil filter, etc.
May do minor maintenance work such as installing accessories, changing, repairing or rotating tires.
Does maintenance work, such as keeping the service area clean, setting up displays, and other duties.
Directs most of his attention to the appearance of the pump island.
Performs other related duties.

SOME PERSONAL QUALIFICATIONS

A genuine liking of people and a concern for their needs.
Neat and pleasant appearance.
Honesty and reliability; ability to write legibly.
Good physical health; willingness to work long hours in all kinds of weather.

TRAINING

High school graduation preferred.
Company training in proper driveway service, station operating policies, and in basic lubrication and car service.

DEALER REPRESENTATIVE

The dealer representative is responsible for the sale of products, services, and merchandising ideas to dealers of petroleum products.

DUTIES

Advises and assists dealers in all phases of their business for the purpose of improving sales, service, and management.
Plans and conducts training clinics on personnel selection and other matters relating to successful business management.
Helps recruit new dealers and makes recommendations to district management.
Plans and suggests special sales promotions or other special events.
Promotes the sale of products of suppliers of closely related items such as tires, batteries, etc.
Makes recommendations and plans for territorial development, including suggestions for locations of new stations.
Assists in informing the public about the industry's affairs.

SOME PERSONAL QUALIFICATIONS

Ability to organize and manage the work of others.
Desire to get ahead; ability to inspire and interest others.
Knowledge of territory, with ability to recognize possible and suitable sites for new stations.
Pleasant personality; neat appearance.

TRAINING

High school graduation.
College degree, preferably in business administration (4 years).

SERVICE STATION MECHANIC (CAR SERVICE SUPERVISOR)

The car service supervisor or mechanic is responsible for all automobile servicing that is not performed at the pump island.

DUTIES

Performs or supervises all lubrication, repairs and mechanical or electrical replacements on a person's car.
Keeps service area clean and orderly; has responsibility for equipment and merchandise displays.
Supervises the activities of the car service employees; trains new employees.
Advises manager/dealer of equipment or supplies needed for satisfactory car service.
Usually employed in large service stations.

SOME PERSONAL QUALIFICATIONS

Ability to supervise and organize the work of others.
Positive attitude to business and customer satisfaction.
Thorough knowledge of automotive equipment and ability to test, repair, and make adjustments.
Knowledge of brake systems, wheel alignment, balancing, etc.
Ability to work in various body positions; good physical condition.

TRAINING

High school graduation is preferred.
Completion of industry-recognized automotive motor tune-up and diagnosis course, covering brake, wheel alignment, balancing and air conditioning.
Courses and clinics required during employment.

TANK TRUCK DRIVER/DRIVER SALESMAN

A driver salesman delivers light oil and package goods to service stations, commercial and/or jobber customers.

DUTIES

Inspects delivery vehicle.
Loads the vehicle with light oils or package goods as required.
Makes delivery of product to the customer and receives collection.
Balances with cashier the amount received for the product delivered.
Reports any maintenance necessary on vehicle.

SOME PERSONAL QUALIFICATIONS

Good driving habits.
Pleasant personality and neat appearance.
Good physical condition.
An aptitude for dealing with figures.

TRAINING

High school education is preferred.
Commercial vehicle driver training preferred.
Some training in auto mechanics in order to handle minor problems with truck equipment.

Social Service

CASEWORKER

The caseworker is responsible for dealing with the problems of individuals or families in a special area. The total number of cases with which she deals is called a caseload.

DUTIES

Determines, after a thorough investigation, whether or not a case is eligible for a money grant or other assistance.
Rechecks each case periodically to review for continued assistance.
Contacts applicant first in his home; later visits may be by telephone or in the office.
Assists his clients in all possible ways to become self-supporting, thus decreasing their needs for public assistance.
Performs clerical duties, such as keeping accurate records on each case, completing and filing special forms, preparing reports needed by the agency.
Investigates conditions in the home to determine if any person (or persons) is eligible for various services such as medical care, nursing home care, legal aid, or any of the help provided through other agencies.
Many other related duties.

SOME PERSONAL QUALIFICATIONS

Sincere interest in and genuine love of people.
Ability to work easily with all kinds of people.
Good judgment; ability to deal with difficult and unpleasant conditions.
Courtesy; patience; pleasant disposition.

TRAINING

High school graduation.
4 years of college with Bachelor's Degree.
Master's Degree preferred and sometimes required.
Agency training (varies with agency).

CASEWORK AIDE

The casework aide assists the casework staff by performing unusual clerical duties and relieving the caseworker to devote more time to taking care of the actual casework of persons receiving services from the agency.

DUTIES

Performs many clerical duties that would normally be done by the caseworkers.
Relieves the caseworker as much as possible so that she may have more time to devote to the casework of clients on her caseload.
Prepares case records and materials needed by the staff for visiting clients.
May check applicants' forms to determine their eligibility for special or general assistance; may check for accuracy of the information.
Takes telephone messages for caseworkers and sees persons who come to the office; records information in case records.
May make home visits to check on information or to make an explanation needed by the client.
Any other duties that may be assigned.

SOME PERSONAL QUALIFICATIONS

Ability to perform clerical duties.
Accuracy; sense of responsibility; good judgment.
A liking for people and a desire to serve and help others.
Pleasant disposition; neat, attractive appearance.

TRAINING

High school graduation.
At least 2 years of college.
Working test period of 6 months.

CASEWORKER STENOGRAPHER

DUTIES

The stenographer transcribes from a dictating machine the dictation for 10 caseworkers.
Takes dictation from casework supervisor; does memos (messages) to various members of the staff and outside personnel; makes out reports.
Has special filing duties that are performed daily.
Substitutes for other stenographers when necessary.
Performs extra related assignments.

SOME PERSONAL QUALIFICATIONS

Good English usage with knowledge of spelling, punctuation, and grammer, knowledge of office practice and procedures.
Ability to exercise good judgment and initiative in planning and carrying out duties.
Accuracy; dependability; a liking for detailed work.

TRAINING

High school graduation.
Successful completion of a stenographic course at a technical school, high school, or business school.

CASEWORKER CLERK

DUTIES

The clerk performs all intra-building messenger duties; does not include incoming and outgoing mail.
Delivers and picks up materials promptly and correctly.
Knows where and how to deliver materials according to the agency's or department's organization.

SOME PERSONAL QUALIFICATIONS

High degree of accuracy and attention to details.
Understanding of the function and purpose of the agency as well as its forms and materials.
A sense of responsibility and pride in his work.
Willingness to work on feet for long periods of time.

TRAINING

High school graduation preferred.
Working test period of 6 months.

CASEWORKER TYPIST

DUTIES

The typist transcribes dictated case record material of more than ordinary difficulty.
Types letters to hospital, the State Department, or to private and other agencies and to individuals.
Types various forms for the county and state.
Types approvals for special assistance grants, being careful to transfer correctly the handwritten material to correct forms.
Keeps daily records on reports obtained from individual workers; makes up monthly reports.

SOME PERSONAL QUALIFICATIONS

Thorough understanding of agency's policies and procedures.
High degree of accuracy and ability to do detailed work.
Knowledge of spelling and punctuation.
Pleasant personality; ability to take instructions.

TRAINING

High school graduation.
Clerical training, including knowledge of operating a typewriter and other office machines.

HOMEMAKER/HOME SERVICES AIDE

The homemaker or home services aide goes into the homes of families receiving public assistance or child welfare services and takes over the duties of an absent or disabled mother.

DUTIES

Plans and prepares meals.
Does all types of marketing for the family including food, clothing, etc., at the most reasonable prices and according to the family's standard of living.
Cleans and takes care of the home in a manner that leaves the normal household routine undisturbed.
Does laundering by the method usually used by the family. Not responsible for heavy laundry unless appliances are available.
Has the responsibility for the care and control of the children in the household; sees that they attend school and perform other duties agreed upon with the mother.
Keeps a time sheet and makes written reports regarding her duties from time to time.
Other related duties.

SOME PERSONAL QUALIFICATIONS

Love of and concern for children; desire to be of service.
Good health; ability to adapt to the household routine of different types of families.
Pleasant disposition and ability to work with and get along with others.

TRAINING

High school graduation preferred – not necessary.
Agency training.

HOUSEMOTHER OR HOUSEPARENT

The houseparent (shown in "Countdown to the 70's") acts as a substitute mother to 16 children who live in a cottage usually cared for by two cottage parents.

DUTIES

Relieves cottage parents during their weekly off days and during vacation and sick leave.
Acts as the parent in a family; tries to take care of each child's needs, giving love, understanding, and individual attention when needed.
Accounts for clothing and supplies used in the cottage when she is relieving; makes necessary clothing repairs; has responsibility for linens, etc.
Keeps cottage and surrounding grounds clean and orderly.
Helps children carry out assigned duties.
Confers with social work staff and informs superintendent of unusual situations; makes reports about her work.
Takes children to dentists, doctors, clothing stores, etc.; keeps good relations with teachers, Sunday School teachers, and others.

SOME PERSONAL QUALIFICATIONS

Sincere love of children and ability to deal with them in an effective manner.
Good health; sense of responsibility; ability to do a variety of jobs.
Ability to see the needs of other people.
A pride in doing work well and the ability to supervise the work and activities of others.

TRAINING

High school graduation.
Working test period of six months.

INTAKE RECEPTIONIST

The intake receptionist has the responsibility of providing the necessary services to clients in the agency's waiting room and performing related clerical duties.

DUTIES

Takes application requests for assistance from persons in the waiting room.
Clears information with the registration department to determine proper caseworker for applicant's case.
Assists persons who are not applicants. Distributes informational pamphlets.
Receives telephone calls; types information on application forms as well as letters and other forms of typing related to personnel.
Keeps accurate record of the number of persons contacted, the number referred to caseworkers, and the services on cases not active; keeps report of telephone calls and other information needed for the agency's records.
Performs other related duties.

SOME PERSONAL QUALIFICATIONS

Accuracy in recording information and making reports.
Courtesy, efficiency, pleasant disposition.
Ability to handle large numbers of requests, complaints, etc., quickly and easily.
Ability to get along with people.

TRAINING

High school graduation preferred.
Training in typewriting and other office machines is necessary.

Engineers' Creed

As a Professional Engineer, I dedicate my professional knowledge and skill to the advancement and betterment of human welfare.

I pledge:

To give the utmost of performance;

To participate in none but honest enterprise;

To live and work according to the laws of man and the highest standards of professional conduct;

To place service before profit, the honor and standing of the profession before personal advantage, and the public welfare above all other considerations.

In humility and with need for Divine Guidance, I make this pledge.

Adopted by
National Society of Professional Engineers
June, 1954

THE ENGINEER

The engineer attempts to find the best possible ways of changing natural resources into u s a b l e goods and services, using the ideas and principles made known by scientists along with his own knowledge about the mathematical and natural sciences.

Engineering is the second largest professional occupation, the largest for men.

DUTIES

There are more than 25 major specialties in engineering, with many branches under each specialty. The basic duties of each engineering group fall into one or more of the following areas:

Research and Development: the engineer tries to increase his understanding of nature so that he can apply his knowledge to the solution of problems or the development of a product or products.
Planning and Design: The engineer plans and/or creates a new product or process or changes and improves an existing one.
Production and Construction: The engineer supervises and/or participates in the production or construction of a product, etc.
Sales: The engineer shows how his product can fit the needs of the buyer or suggests changes that will meet the customers' needs.
Administration: The engineer supervises the work of others.
Teaching: The engineer teaches students who wish to become engineers.
Consultation: The engineer acts as an advisor in his particular specialty in engineering.

SOME PERSONAL QUALIFICATIONS

Satisfaction in solving problems, working with ideas, thinking through puzzles.
Willingness to work hard and stick with a job until it is finished.
Ability to work well with others, both as a follower and as a leader.
A curiosity about how things work; a desire to create things.
Above average intelligence, with strong aptitudes in math and sciences.
Ability to communicate, both orally and in writing.
Talent for making clear sketches of complicated things or operations.
Honesty; dependability; good judgment.

TRAINING

High school graduation.
College training leading to a bachelor's degree in engineering (4 or 5 years).
Additional training for top-level jobs.
Licensing or registration of professional engineers required by all states. (Requirements include graduation from an approved engineering program, 4 years of experience, and the passing of a state examination in engineering.)

ELECTRICAL ENGINEER

The electrical engineer designs, develops, and supervises the manufacture of electrical and electronic equipment, television, radar, computers, etc.; electrical appliances of all kinds. The engineer is also responsible for the design and operation of methods or facilities for distributing and generating electrical power.

Electrical engineering is the largest branch of engineering.

The electrical engineer may do one or more of the following activities:

Works on development and improvement of electrical appliances for home and business.
Performs activities related to the planning and production of electronic instruments and equipment.
Takes part in the design and development of electric motors or equipment that create and transmit power.
Plans layout and construction of large electric power plants and stations.
Works on problems related to automated and intricate machinery used by industry.

Electrical engineers work in a number of jobs in the general fields of electronics, electrical machinery and equipment manufacturing, light and power companies, telephone and telegraph industry, educational institutions, and government agencies.

MECHANICAL ENGINEER

The mechanical engineer specializes in the design, manufacture, and operative effectiveness of motors and machines that generate, transmit, or use power.

Mechanical engineers form the second largest group in engineering. They are employed in every branch of industry, and their duties will vary with the field in which they work.

The work of the mechanical engineer may take place in one of the following fields:

Aviation: The engineer works with many phases of the research, design, and production of parts for every system in aviation.
Air Conditioning: The mechanical engineer plays a major role in the development and expansion of air conditioning.
Heating: He designs, develops, and produces equipment that will provide adequate heat for a specific amount of space.
Automation: The mechanical engineer plays the leading part in designing and developing machines that produce automatically more and better goods or services for the consumer.
Fuels: The mechanical engineer has performed and continues to perform major duties involving the discovery, refining, storage, and transportation of all types of fuels, not only gasoline, oil, etc., but also fuels used in nuclear reactors.
Machines: Machines that make new tools are largely designed and constructed by mechanical engineers.
Transportation: The work of developing faster, better, and safer means of transportation is the responsibility of the mechanical engineer. He works to improve existing vehicles, ranging from the automobile to spacecraft.
Other special fields include jobs in chemical industries, nuclear energy, power and its production and use, and all types of manufactured products.

CIVIL ENGINEER

The civil engineer plans, designs, or supervises construction of roads, harbors, tunnels, airports, bridges, water supply and sewage systems, buildings, and many other structures.

Example: The work of the civil engineer may include the surveying and mapping of the site for a proposed project to find out if it is usable; the research and design leading to plans and specifications for the work; and finally, the layout, construction, and completion of the project.

Duties of the civil engineer may be in one of the following fields:

Structural Engineering – the structure and construction of buildings, bridges, dams, tunnels, etc.

Highway and Railway Engineering – the planning, design, construction, operation, maintenance, etc., of highways, railways, and city streets.

Sanitary Engineering – the disposal of sewage and other wastes; the development and maintenance of water supplies; and engineering problems connected with environmental health.

Air Transport – management, planning, design, construction, etc., of commercial and military airports.

City Planning – engineering related to planning new communities or rebuilding old ones – also shopping centers or other city projects.

Other areas include engineering mechanics; irrigation and drainage; development, production, and distribution of power from water, oil, coal, and atomic reactors; soil mechanics and foundations; pipeline engineering; surveying and mapping; waterways and harbors.

The civil engineer of the future will help to plan better housing, bigger buildings, larger airports, improved means of transportation, sufficient water supply, and many other things about which man has not yet dreamed.

CHEMICAL ENGINEER

The chemical engineer attempts to convert materials found in nature into useful products by using the principles of chemistry and physics or by means of mechanical reactions or physical changes.

The chemical engineer performs one or more of the following duties:

Does research to develop or improve a process, determine the type of equipment it requires and whether or not the process will work successfully.

Works on the development of a project to provide information for full-scale production, making the changes necessary to prevent costly errors.

Plans, designs, and constructs chemical plants and equipment.

Engages in the research needed to develop and improve processes for manufacturing or producing large quantities of chemicals.

Examples of the products resulting from the work of the chemical engineer: the conversion of raw materials into fertilizer, insecticides, synthetic fibers, antibiotics, plastics, detergents and soaps, fuel adhesives, synthetic rubber, and many, many others.

Americans in Uniform

FOOD SERVICE SUPERVISOR

The food service supervisor is a trained dietitian who serves as principal advisor to the command on all phases of food preparation.

DUTIES

Performs his work in a mess hall (dining hall) or hospital, bakery, meat cutting plant, or similar unit.
Conducts surveys about individual likes and dislikes, food preparation methods, and food conservation.
Inspects dining halls, kitchens, bakeries, and other facilities for efficiency of operation and other standard requirements.
Conducts training and instruction courses for food service personnel.
Makes reports, handles correspondence and other forms of communication.
Gives advice about troop food preferences and issues changes in the master menu.
Aids in training new personnel in the different procedures to be followed.
Performs other related duties.

SOME PERSONAL QUALIFICATIONS

Ability to get along with all types of people including supervisory personnel; ability to organize and direct the work of others.
A sincere interest and pride in his work.
A liking for food and a genuine desire to make it look attractive and taste good.
An aptitude for science.
Good health.

TRAINING

High school graduation.
College degree required for a dietitian is helpful.
Training in series of schools and locations required by army.

ASSISTANT SYSTEMS ANALYST

The systems analyst (shown on "Countdown to the 70's") studies such broad subjects as personnel, supply, finance, management, and medical areas, using established methods to develop new systems or improve existing ones.

DUTIES

Studies various aspects of a particular phase or phases of a business or operation to determine the best ways to get results from the use of computers.
Decides on the kinds of results desired and determines the way in which the computer will have to respond in order to produce the information desired.
Examines systems that are already in use to determine ways in which they can be improved to produce desired information.
Duties may involve analyzing a system for the use of the computer in connection with a payroll, distribution of supplies, various types of records, etc.

SOME PERSONAL QUALIFICATIONS

Ability to solve difficult problems in an orderly manner.
Aptitude for mathematics.
Good background knowledge of various phases of business.
Above average intelligence.
Patience and willingness to stick with a job until it is completed.

TRAINING

High school graduation.
Additional specialized vocational or college training.

RADIO OPERATOR

The radio operator (in "Countdown to the 70's") sets up and operates field radio communications equipment to send and receive messages.

DUTIES

Sets up, installs and adjusts the necessary equipment, including antennas, generators, etc.
Processes outgoing messages; uses the Morse code to translate incoming messages into a clear, readable form.
Keeps a log or record and files the log sheets in a station file.
Uses prescribed procedures in handling network operation.
Makes the minor repairs and adjustments necessary to maintain open communications.
Supervises the work of other radio operators involved in the procedure of sending and receiving messages.

SOME PERSONAL QUALIFICATIONS

A good speaking voice and ability to hear and record accurately.
Ability to remember details such as names, numbers and dates.
Ability to record messages and keep accurate records.

TRAINING

High school diploma.
On-the-job training.
Special training in the armed forces or in a recognized training program.

SMALL ARMS REPAIRMAN

The small arms repairman repairs and rebuilds hand and shoulder-type weapons. Such weapons may include pistols, revolvers, rifles, machineguns, sub-machineguns, shotguns, etc.

DUTIES

Inspects and operates the moving parts of weapons.
Takes weapons apart and examines the main sections to determine the condition of each.
Operates assemblies by hand to test the workability and ease of operation.
Uses special instruments to test the degree of wear of various parts.
Inspects weapons for defects such as rust, condition of barrels, looseness of sights.
Decides on the kind of repair needed.
Performs such operations as grinding, sandblasting, removing rust and grease, soldering, replacing worn-out parts.
Reassembles weapons and tests for smooth, efficient operation.

SOME PERSONAL QUALIFICATIONS

Mechanical aptitudes; ability to work with hands easily and accurately.
Normal eyesight; patience; intelligence.
Willingness to do tedious work for long periods of time.

TRAINING

High school graduation.
Specialized training in the armed forces or training in a recognized gunsmith course.

SOC 95

PHOTOGRAPHER

The still photographer (as shown in "Countdown to the 70's") takes photographs for news releases, publicity, identification, training, medical history, or for their scenic value.

DUTIES

Selects the proper camera, film, lenses, filters, etc.
Takes photographs from certain positions or moves around to get the desired angle or action of the person or thing being photographed; sometimes takes aerial photographs.
Keeps camera in good condition.
Keeps proper records on photographs taken.
Sometimes gives instructions to and supervises the work of other photographers.
Ferforms other related duties.

SOME PERSONAL QUALIFICATIONS

Ability to use imagination in taking photographs.
Artistic talent; ability to move around easily in order to obtain correct position for photographing.
Pleasing personality; ability to make persons feel at ease.
Experience in all phases of photography and knowledge of cameras and the development of pictures.

TRAINING

High school graduation is preferred.
Special training in a recognized training program.

Newspapers—
They Tell Us
What's Happening

CITY NEWS EDITOR

The city news editor makes assignments, accepts, rejects, or changes news articles and sometimes writes articles for publication.

DUTIES

Directs the collection and handling of news, keeping in mind the policy of his newspaper.
Reads news releases and shortens, changes or rewrites the material according to its importance and the amount of space available.
Knows the amount of space available for news on each page (space not used for advertising).
Receives telephone calls about emergencies and other newsworthy incidents and assigns reporters to cover the stories.
Keeps himself well informed about all phases of the city's life – physical, political, cultural, etc.

SOME PERSONAL QUALIFICATIONS

An excellent sense of news and the ability to write clearly, correctly, and to the point.
Good knowledge of English; accuracy in dealing with facts as well as the written word.
Interest in and understanding of the community.
Ability to work well with others; a keen sense of responsibility.
Good judgment and honesty in all activities.

TRAINING

High school graduation, with good background in English, spelling, literature, composition, etc.
College training, with major in journalism preferred. (4 years)
Prior experience necessary in most cases.

NEWS REPORTER

The reporter gathers information and writes news stories for publication in daily or weekly newspapers, also press services and syndicates. (A syndicate is a business concern that sells materials for publication in a number of newspapers; or a group of newspapers under one management.)

DUTIES

Obtains information by interviewing people, usually taking notes as he collects the facts; may interview in person or by telephone.
Collects facts by attending meetings and court hearings, by watching events as they happen (accidents, fires, football games, etc.)
Sometimes telephones information to newspaper where it is taken by a "re-write man" or recorded on a dictating machine.
May cover "beats" (special news sources such as police stations, city hall, governor's office, etc.), which he visits and contacts regularly.
Receives special assignments occasionally; sometimes discovers news stories.
May obtain facts from library, news files, or other forms of research.

SOME PERSONAL QUALIFICATIONS

Talent for communicating with people. Ability to write well.
Curiosity (a "nose for news") and a desire to work until he knows the "why" of things.
Ability to report facts accurately without expressing his opinion.
Willingness to take criticism.
Pleasant personality; sincerity; good judgment; patience.

TRAINING

High school graduation.
College training with degree in journalism preferred.

PROMOTION MANAGER

The promotion manager plans activities that promote friendly relations with the public and acts as the newspaper's advertising agent.

DUTIES

Plans public service events that may maintain or increase a feeling of goodwill among the readers.
Plans special guided tours such as having various groups (especially students) visit the newspaper.
Organizes and produces publications designed especially for employees.
Works with the advertising department to help secure national advertising throughout the paper.
May work with an advertising agency in planning national advertising for the newspaper.

SOME PERSONAL QUALIFICATIONS

Ability to constantly think of new and unusual ideas for promotion plans.
Physical and mental ability to work long hours, often under pressure, and with all types of people.
A genuine interest in and liking for people.
Patience; understanding; ability to talk well about a number of subjects and to think quickly.

TRAINING

High school graduation.
College degree, with some background study in public relations.

LINOTYPE OPERATOR

The linotype operator operates a machine to cast complete lines of type from metal and deposits them in a galley for printing. (A galley is an oblong steel tray that holds type.)

DUTIES

Turns a switch to start the machine. An automatic time switch turns on the heating pot containing type metal before the machine begins to operate.
Operates a triple keyboard by touching the keys lightly.
Presses a key that allows a matrix to be released. (A matrix is a mold from which the raised surface of a letter, number, etc., is made.)
Reads copy and pushes keys to set lines of type at a regulated length and thickness of line.
Moves a lever that deposits the line of type in a galley.
Adds pigs of metal (bars) to the melting pot occasionally to replenish the supply of hot metal.
Removes galley of type when it is filled.

SOME PERSONAL QUALIFICATIONS

Ability to read, concentrate on copy and operate for long periods of time.
A thorough knowledge of English grammar and word division.
Ability to judge the spacing of type on the page.
Good eyesight; ability to use both hands easily.

TRAINING

High school graduation is preferred.
Apprenticeship training in union-operated shops. (6 years)
Training in technical schools and junior colleges (usually 2 years). After several years' experience, graduates may apply for tests to join the union.

LAYOUT ARTIST

The layout artist plans and arranges art layouts, using sketches, pictures or diagrams to illustrate news events, feature articles or advertisements.

DUTIES

Creates drawings to illustrate advertisements appearing in a newspaper.
Works on one ad or may work on a section of several pages for a department store or a special promotion.
Works in black and white or in three colors and black.
Examines photographs, etc., to determine most effective layout to illustrate the subject matter.
Trims pictures or drawings to fit space and pastes in artistic arrangement on background.
Draws or paints border around illustrations; retouches photos.

SOME PERSONAL QUALIFICATIONS

An artistic talent and knowledge of color, composition, balance, and arrangement.
Creative ability; talent for thinking of new ways to express old or new ideas.
Desire to stick with a job until it is completed; pride in one's work.

TRAINING

High school graduation.
Graduation from college with art degree or from a commercial art school; or training in a technical school.

THE PRESSMAN

The pressman (shown in "Countdown to the 70's") tends one of the giant presses.

The pressroom is called the heart of the newspaper plant, and the t h r o b b i n gs of its heartbeat can be heard day and night.

The large presses can produce 26,000 112-page newspapers in an hour, cut and folded and ready for delivery to the reader. These mechancial giants print black and three colors.

DUTIES

What part do the pressmen play in the operation?

In one year, at the newspaper in "Countdown to the 70's," the pressmen feed
two million pounds of black ink into the presses.
They pour in 200,000 pounds of colored ink.
They use 180 million pounds of newsprint.
They work in a glass-enclosed pressroom.
They tend a long line of presses that deliver newspapers to the waiting trucks.
They keep presses in working condition.

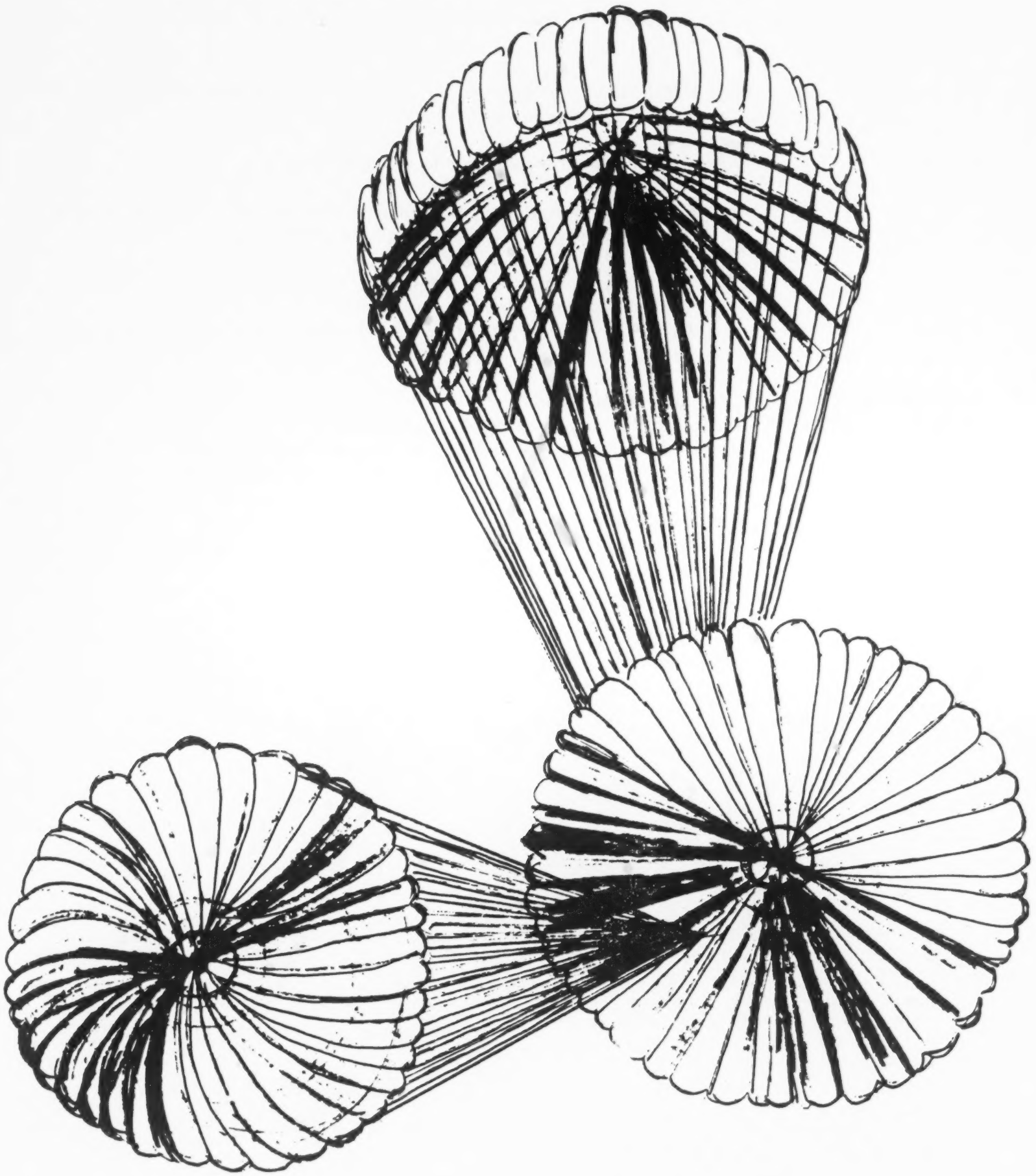
SOME PERSONAL QUALIFICATIONS

Pride in producing work.
Mechanical aptitude; a sense of responsibility.
Desire to exercise care in watching the operation of the presses.
Willingness to assume responsibility for the correct printing of material.

TRAINING

High school graduation.
Apprenticeship training (5 years), or
Training in a recognized training program.

Textile Talk



OPENER

The opener tends one or more machines that open, clean, f l u f f and mix compressed cotton or synthetic fibers in preparation for the next step of the weaving process.

DUTIES

May open bales of cotton or other fibers.
Starts machines and feeds layers of fibers from several bales into machine hoppers to remove trash and produce a uniform blend.
Observes the processing of fibers and the signal lights to be sure machines are operating smoothly.
Stops machines and pulls fibers from beaters that become clogged.
Cleans and oils machines.
Weighs fibers before feeding into the machines.

SOME PERSONAL QUALIFICATIONS

Mechanical aptitude; ability to use hands quickly and easily.
Normal vision; accuracy; a keen sense of responsibility.
Ability to notice signs of trouble and the judgment to handle any situation that may arise.

TRAINING

High school graduation not required, but may be expected in the future.
Training on the job varies with company.

THE DOFFER

The doffer removes the bobbins of yarn from spindles on a machine. (A bobbin is a round device or cylinder on which thread is wound. A spindle is the rod or pin that holds the bobbin.)

DUTIES

Takes bobbins of yarn from the spindles of spinning or twisting frames.
Stops the machine and presses the pedal to lower the ring bar, thus making it easier for the yarn to wind around the spindle when restarting.
Removes full bobbins of yarn from spindles, deposits yarn in a handtruck, and places empty bobbins on machines.
Restarts machine after piecing or tying breaks in the yarn ends.
Applies grease or oil to the rings, using finger or an oil can.

SOME PERSONAL QUALIFICATIONS

A knack for working with machines.
Normal vision and good body coordination.
Ability to concentrate on a routine type job.
Alertness and ability to detect mechanical defects or trouble.

TRAINING

High school graduation not required; may be expected in the future.
On-the-job training.

THE CARDER

The carder mounts cones of thread onto spindles and threads the ends through guides.
The carding machine consists of revolving spindles studded with fine wire teeth.

DUTIES

Tends the operation of one or more machines that prepare or card cotton or other fibers by opening them out, arranging them parallel, and transforming them into a rope-like untwisted strand called sliver (sly-ver).
May feed stock or fibers into the machine by placing the roll on the machine, pinching together ends of the new lap onto ends of previous roll.
Keeps hopper supplied with loose fibers.
Removes filled cans or spools and replaces them with empty cans or spools.
May remove fibers, dust or lint from machinery.

SOME PERSONAL QUALIFICATIONS

Willingness to perform the same operations for long periods of time.
Good vision; ability to detect trouble and to keep operation running smoothly.
Average intelligence; a sense of responsibility; pride in doing a job well.

TRAINING

High school graduation not required.
On-the-job training.

THE KNITTER

The knitter or knitting machine operator operates one or more machines that knit fabrics, garment parts or other articles from yarn.

DUTIES

Places yarn on the machine, tying end of yarn to yarn already in the machine; or threads yarn through guides, etc.
Starts the machine and laps end of the goods around the proper roller.
Keeps an eye on knitting in order to notice any breaks in the yarn, knitting defects or other mishaps.
Ties broken yarn ends; replaces yarn packages that have been used.
Notifies knitting machine mechanic of mechanical defects.
Cuts knitted fabric, using scissors, and takes roll or garment from machine.
Performs other related duties.

SOME PERSONAL QUALIFICATIONS

A genuine liking for detailed mechanical work.
Normal vision; ability to coordinate hand and eye movement.
Willingness to perform some operations over and over.
Pride in doing work well.

TRAINING

High school graduation not required.
On-the-job training.

THE WEAVER

The weaver operates one or more looms that produce woven cloth.
A weaver may operate a plain loom, a box loom, a dobby loom, or a Jacquard loom.

DUTIES

Operates or tends one or more looms that weave materials.
Pieces up broken warp threads by twisting or tying the two ends together, drawing the yarn through the harness, and/or drop wires when necessary.
Replaces empty bobbins in the shuttles with full ones, unless the loom operates automatically.
Inspects the product as it is woven for imperfections; stops loom to remove them when this occurs.

SOME PERSONAL QUALIFICATIONS

Mechanical aptitude and ability.
Normal vision; good health; good hand and eye movement.
Ability to perform similar activities over and over without becoming bored.
A sense of responsibility and pride in seeing that work operates smoothly.

TRAINING

High school graduation not required, but may be expected in the future.
On-the-job training.

DYEING MACHINE OPERATOR

The dyeing machine operator operates one or more machines that dye yarn before it is woven.

DUTIES

Places large numbers of "packages" of yarn on a carrier or frame and loads them into the dyeing machine.
Weighs yarn before it goes into a machine.
Mixes colors in a tank by machine and runs dye into the dyeing machine where it goes through a pump and circulates.
Changes lever to direct flow of dye when machine is not automatic.
Checks temperatures, pressure, time.
Drains extra dye and runs washing solution into machine.
Removes yarn and places it into an oven or receptacle for drying yarn.

SOME PERSONAL QUALIFICATIONS

Knowledge of machines and aptitude for operating them.
Sense of responsibility and pride in doing a job well.
Ability to detect changes or variations in color or to notice an incorrect dye mixture.
Willingness to take directions and to repeat same operations for long periods of time.

TRAINING

High school graduation preferred.
On-the-job training.

TEXTILE CHEMIST

The textile chemist works in the development of dyes and finishes for textiles (cloth).

DUTIES

Works out formulas for all chemical treatments involved in finishing operations.
Conducts research in development of dyes.
Directs workers engaged in various kinds of laboratory tests.
Develops new or improved dyes and prepares the color formulas.
Works out formulas for the mill operator to use in dyeing a specific texture or quality of goods.
Uses intricate machinery in testing colors, etc.
Sometimes uses a computer in checking shades or color combinations and variations. Must know how to use a computer to get the desired answer or results.
May work in testing, analyzing or checking quality control of dyes.
Performs other related duties.

SOME PERSONAL QUALIFICATIONS

Above average intelligence; ability to arrange thoughts in an orderly manner.
An interest in and an aptitude for mathematics and sciences.
Ability to work well with others.
A desire to study and learn.
Patience and accuracy; a desire to keep trying in spite of disappointments.

TRAINING

High school graduation.
College training with Bachelor of Science Degree in Textile Chemistry.

Let's Print It

People at Work

PLANT SUPERINTENDENT

The plant superintendent in the printing industry manages and coordinates work in all production departments.

DUTIES

Schedules and follows each job through the plant and checks for quality of work at each stage of production.
Keeps work organized so that the workers in various departments are kept busy, thus preventing a lag in production.
Hires or assists in hiring production personnel.
Works closely with the foreman of each department in planning, scheduling, and supervising production work.

SOME PERSONAL QUALIFICATIONS

Ability to organize and to supervise the work of others.
Pleasant disposition; ability to work well with others.
General knowledge of all phases of the printing business.
Good judgment and ability to make quick decisions.
Ability to follow written instructions exactly and accurately.

TRAINING

Graduation from high school.
6 years of apprenticeship training in union-operated shops (as shown in film).
Training received in recognized schools may reduce years of apprenticeship training required.

LINOTYPE OPERATOR

The linotype operator operates a machine to cast complete lines of type from metal and deposits them in a galley for printing. (A galley is an oblong steel tray that holds type.)

DUTIES

Operates a triple keyboard by touching the keys lightly. The left section contains keys for small letters, the center section keys for numbers and figures, and the right section has capital letters.
Presses a key that allows a matrix to be released. (A matrix is a mold from which the raised surface of a letter, number, etc., is made.)
Reads copy and pushes keys to set lines of type at a regulated length and thickness of line.
Adds "pigs" of metal (bars) to the melting pot occasionally to replenish the supply.
Moves a lever that deposits the line of type in a galley; removes galley of type when it is filled.

SOME PERSONAL QUALIFICATIONS

Ability to read, concentrate on copy, and operate machines for long periods of time.
Good knowledge of English grammar and word division.
Ability to judge the spacing of type on the page.
Good eyesight; ability to use both hands easily.

TRAINING

High school graduation.
Apprenticeship training in union-operated shops. (6 years)
Training in technical schools and junior colleges (usually 2 years). After several years' experience, graduates may apply for tests to join the union.

PERFORATOR OPERATOR

The perforator operator operates a machine (similar to a typewriter) that perforates, or makes holes in, a ribbon of tape.

DUTIES

Loads a roll of paper into machines before beginning to type.
Sets controls for length and thickness of line and makes other necessary adjustments.
Perforates paper as he or she strikes keys. The perforations indicate characters, words, sentences, length of lines, spacing, and hyphenation. The tape, when fed into an electronic device, results in the printing of camera-ready copy.

SOME PERSONAL QUALIFICATIONS

Good eyesight; accuracy; mechanical aptitude.
Ability to type rapidly and accurately.
Knowledge of printing terms and measurements.
Ability to follow instructions.
Willingness to work for long hours performing similar types of operations.

TRAINING

High school graduation is desirable.
Training as tape-perforating machine operator, usually 1 year.

PROOFREADER

The proofreader reads the galley proof and checks it for errors. (A galley is the shallow tray in which the type is assembled before a proof is made.)

DUTIES

Checks proof or trial pages against the original copy before a final printing is made.
May check proof by placing it and copy side by side on a reading board; or may check proof while a copyholder reads aloud from original copy.
Checks for errors in grammar, typography, or composition.
Uses special proofreader's marks to indicate errors.
Returns copy to compositor for correction.
May proofread the same item several times.

SOME PERSONAL QUALIFICATIONS

Excellent background in grammar and spelling.
Alertness and ability to detect errors quickly and easily.
Good eyesight; willingness to perform similar routine work for long periods of time.
Pride in performing one's work well.

TRAINING

High school graduation.
Apprenticeship training in union-operated shops.
Training in a technical school or junior college may reduce time spent in apprenticeship training.

COMMERCIAL ARTIST

The commercial artist (shown in "Countdown to the 70's") performs the artwork needed for the various pamphlets, brochures, books, booklets, catalogs, etc., produced by the printing company.

DUTIES

Has responsibility for any creative or original artwork that is needed for any publication.
Plans the layout or arrangement of the various parts included in a customer's order.
Cuts and pastes together the basic parts of the artwork, using the tools necessary for accurate measurement.
Scales copy and pictures to fit a given or specific space; selects type faces or appropriate type for copy, headings, etc.
Performs other related and sometimes detailed duties.

SOME PERSONAL QUALIFICATIONS

Creative and artistic ability; good imagination; distinctive art style.
Good eye for color and judgment concerning the use of color.
Ability to stick with a product until the results are pleasing and satisfactory.
Ability to work with others and to follow orders.

TRAINING

High school graduation is desirable.
Training in commercial art at a vocational school or junior college.

CAMERAMAN

The cameraman (in "Countdown to the 70's") photographs copy and develops the negative from which the image is transferred to a press plate for printing.

DUTIES

Reproduces copy on film and may enlarge or reduce the size of the original copy.
Reproduces all photographs through a special screen.
Develops photographic negatives from which the offset plates are "burned".
Knows how to make accurate adjustments on the camera.
Hangs up negatives to dry after they have been processed.
Performs other related duties.

SOME PERSONAL QUALIFICATIONS

Artistic ability; good eye for color.
Mechanical aptitude; good hand-eye coordination.
Knowledge of photographic procedures.
Ability to follow instructions.
Patience; accuracy; good judgment.

TRAINING

High school graduation is desirable.
On-the-job training, or
Training in the procedure of photography in a recognized school or training program.

TWO-COLOR PRESSMAN

The two-color pressman is responsible for operating the press in a manner that will result in producing printed work of high quality.

DUTIES

Formulates and matches ink to a selected color; needs to understand the chemical makeup of ink.
Checks the color against a master sheet that has been approved by the customer or the plant superintendent.
Adjusts or sets machine for size and thickness of sheets.
Adjusts the pressure on the sheets of both the ink rollers and the press cylinders.
Balances the control of water and ink solutions.
Sees that feeder is loaded with paper; operates press.
Performs other related duties.

SOME PERSONAL QUALIFICATIONS

Good eye for color; ability to match colors to specific samples.
Mechanical ability; a knack for detecting trouble and for keeping operation running smoothly.
Ability to follow instructions and to work well with others.
Good health; willingness to stand for long periods of time.

TRAINING

High school graduation.
Apprenticeship training.
Special training in a recognized school or training program.
On-the-job training.

BINDERY WORKER

The bindery worker performs one or more operations in the b i n d i n g of books, magazines, pamphlets, directories, and catalogs.

DUTIES

Feeds covers, signatures, and sheets into various machines for stitching, folding, ruling, roughing, indexing, and gluing operations. (A signature is a sheet that becomes part of a book, brochure, etc., when it is folded.)
Removes, stacks, and packs printed material in various stages of completion as it accumulates on the delivery of machines.
Examines materials to see that the pages are bound in proper order.
Draws on the covers of flat-stitched books.
Drills holes when necessary and uses machine or tools to round off the corners.
Inserts loose leaf sheets into ring binders.
Folds materials by hand.

SOME PERSONAL QUALIFICATIONS

Excellent finger dexterity; good eyesight, alertness, and speed.
Ability to concentrate on work activities and to perform under supervision.
Willingness to perform the same operation for long hours.

TRAINING

Graduation from high school.
Apprenticeship training.
2 years training for female worker.
4 years training for male worker.
Special instruction in a recognized school or training program.

When You
Eat Out

RESTAURANT MANAGER

The restaurant manager supervises and coordinates the activities of workers in a coffee shop or restaurant.

DUTIES

Performs some or all of the following duties:
Plans or discusses menus with chef or head cook.
Inspects the dining room, kitchen, and equipment to see that it meets sanitary regulations for cleanliness, etc.
Arranges for any special services that have been requested, such as planned luncheons or banquets.
Listens to complaints and makes adjustments.
Hires workers for the dining room and kitchen, assigns duties and plans a work schedule.
Sometimes responsible for ordering, receiving, inspecting and storing all food and supplies. Keeps a record of supplies on hand; checks market prices.
Deals with salesmen of all kinds; purchases may vary from season to season.

SOME PERSONAL QUALIFICATIONS

Must like people and be able to get along with them.
Willingness to be on feet for long hours.
Imagination and ability to create ideas for business growth; good salesmanship ability.
General knowledge of food service and the important factors involved.
Good physical health. Accuracy; honesty; enthusiasm.

TRAINING

High school graduation.
College degree with training in food service management, institutional management, or business administration.

— or —

Training in a food service program at a technical school (usually 2 years).

THE WAITER OR WAITRESS

The waiter or waitress sets tables and serves meals to guests of the restaurant.

DUTIES

Hands the menu to guests, answers questions, and makes suggestions about choice of foods, etc.
Writes customers' orders on checks.
Gives order to the chef or to the proper person in the kitchen.
Pays close attention at all times to the needs of guests; keeps water glasses filled, etc.
Receives complaints, if any, and reports them to the management.
Totals the bill and receives money from customers or refers them to the cashier.
Serves courses of the meal; performs other services according to the restaurants' standards and practices.
May set tables, replace linens.

SOME PERSONAL QUALIFICATIONS

Ability to get along with all kinds of people. Pleasant voice; neat; friendly personality. Good memory; desire to please and be of service. Good hand and arm movement; speed; accuracy.

TRAINING

High school graduation preferred.
On-the-job training.
Training received in some technical schools or vocational schools.

BUS BOY OR BUS GIRL

The bus boy or girl may clear tables or perform similar duties that aid in the smooth operation of a food service establishment.

DUTIES

Performs some of the following duties:
Removes soiled dishes from tables after guests leave and takes them to the kitchen.
Sometimes sets the tables and serves water and butter.
Keeps serving tables supplied with relishes, mustard, etc.
Keeps supply of clean linens, silverware, glassware and dishes in dining room.
Cleans and polishes glass shelves, doors of service bars, etc.
May transfer food and dishes between floors.

SOME PERSONAL QUALIFICATIONS

Courteous and friendly personality; neat appearance.
Good health; ability to carry heavy trays with no difficulty.
Ability to work under pressure.
Ability to follow instructions and to get along well with others.

TRAINING

Training in high school food service programs.
On-the-job training.

THE HEAD COOK

The head cook in restaurants or eating establishments is responsible for the preparation of large quantities of food.

DUTIES

May perform some or all of the following:
Supervises the staff of cooks and kitchen helpers; sometimes trains other cooks.
Has responsibility for the preparation of all the food and estimates the amount that will be needed.
Decides on the sizes of the food servings after consultation with management.
May have the responsibility of purchasing food supplies and keeping the food preparation department running profitably.
Creates new dishes and works to improve the flavor of existing ones.

SOME PERSONAL QUALIFICATIONS

Good health and ability to stand for long periods of time.
Willingness to work under pressure.
Genuine interest in all phases of food preparation and pride in creating attractive as well as tasty food.
Ability to organize work and to supervise the work of others.

TRAINING

High school graduation is preferred.
Training may be received in high school food service program or food service training in a technical school, or
On-the-job training.

SALAD MAKER

The salad maker (also called "salad girl") is responsible for the preparation of salads that are served in the restaurant.

DUTIES

Cleans the area in which she works.
Supervises or assists in cleaning the line. (The line consists of glass-enclosed refrigerated cases in which prepared salads are kept.)
Prepares salad greens, unless they have been prepared beforehand.
Prepares salads that appear on the menu; supervises salad girls in their preparation of salads.
Fixes some of the salad dressings and sees that all containers are filled.
Keeps the "line" filled with salads; fixes a greater number of the more popular kinds; fixes limited number of those sold in smaller amounts.
Does as much preparation as possible for future operations.
Reports to kitchen management if fresh fruit, greens, etc., are not acceptable.

SOME PERSONAL QUALIFICATIONS

Artistic ability in arranging food attractively.
Ability to work quickly and easily with hands.
Desire to create product that represents quality and is pleasing to the eye.
Ability to work well with all types of people.

TRAINING

High school diploma preferred.
On-the-job training, or training in a high school or technical school program.

FRY COOK

The fry cook is responsible for all of the food prepared at the fry station.

DUTIES

Cooks fried or sauteed foods to order; prepares orders as soon as received.
Assists head cook in preparing a general menu.
Deep fries fish, shrimp, chicken, etc.; prepares omelets, certain hot sandwiches, and other dishes that appear on the menu.
Has responsibility for the cleanliness of his station; sees that cooking utensils are kept clean.
Wears white uniform with a chef's hat.
Follows instructions of head cook or chef and may prepare foods (other than fried) under his supervision.
May relieve other cooks, thus broadening his experience.

SOME PERSONAL QUALIFICATIONS

Keen sense of taste and smell.
Knowledge of food preparation — and a special interest in quality as well as attractiveness in the results.
Ability to work under pressure and to work well with others.
Artistic ability in arranging food attractively.

TRAINING

High school diploma or equivalent preferred.
On-the-job training; may advance with experience.
Training in high school or technical schools.

THE HEAD BAKER

The head baker is responsible for all types of baking performed in the restaurant.

DUTIES

Makes or supervises the making of rolls, breads of all kinds, cakes, pies, pastries, and other types of baked goods.
Operates the equipment used to mix various ingredients, to divide, to form, and to bake the products.
Estimates the amounts of each product needed to take care of the day's menu.
Selects and inspects ingredients that go into the various finished products.

SOME PERSONAL QUALIFICATIONS

Good physical condition; willingness to work hard and to perform same duties over and over.
Excellent sense of taste and smell; desire to create products that look attractive and appealing.
Willingness to bend, stoop, walk, stand, etc., during the day's work.
Ability to organize and supervise the work of others.

TRAINING

High school graduation preferred.
On-the-job training. Or
Apprenticeship training (3 to 4 years). Or
Training in a vocational school.

The Mail
Must Go Through

THE STATION OR BRANCH SUPERINTENDENT

The station or branch superintendent is responsible for the operations of a station or branch post office.

DUTIES

Provides all of the window services required for the public.
Plans and supervises delivery and collection assignments for carriers.
Takes care of the distribution of incoming mail to be delivered at a general window, to boxholders, and/or on carrier routes within the geographic limits of its jurisdiction.
When necessary, distributes and dispatches mail posted within his area.
Trains new employees in all aspects of station operation.
Directs or takes part in the preparation of all records for the station.
Performs other related duties.

SOME PERSONAL QUALIFICATIONS

Friendly manner and genuine liking for people; ability to deal with the public and to promote good relations with customers.
Ability to organize work and to supervise the work of others.
General knowledge of postal procedures.
Good judgment; accuracy; ability to work under pressure; unusual sense of responsibility.

TRAINING

Must pass Civil Service Examination.
Position is filled from the top names on the register.

THE WINDOW CLERK

The window clerk performs a variety of services at a public w i n d o w of a post office or a branch or station.

DUTIES

Performs some or all of the following duties:
Sells postage stamps, postal cards, savings stamps, certificates, etc.
Accepts and weighs parcel post packages, sells and cashes money orders; registers mail.
Distributes general delivery letter mail and packages.
Rents post office boxes and receives rental payments.
Accepts money for postal savings accounts; sells United States Savings Bonds.
Gives information to the public concerning postal regulations, mailing restrictions, rates, etc.
May perform other duties.

SOME PERSONAL QUALIFICATIONS

Ability to operate quickly and accurately.
Courteous and pleasing personality; ability to deal with the public.
A knack for dealing with figures; a good memory, with ability to retain facts and figures.
Neat appearance; good judgment; a sense of responsibility.

TRAINING

High school education desirable.
Must pass Civil Service Examinations.
Positions are filled from the highest persons on register.

THE CITY CARRIER

The city carrier is responsible for the prompt and efficient delivery and collection of mail in a certain prescribed area of the city.

DUTIES

Arranges all classes of mail in the order to be delivered along an established route.
Enters change of address orders in change of address book and on special forms; readdresses mail to be forwarded; sorts such mail into throw-back case for convenient handling by clerks.
Delivers mail on a regular schedule, picking up additional mail from the relay boxes. Accepts letters for mailing from patrons.
Delivers and collects charges on customs, postage-due, and C.O.D. mail matter. Handles registered mail.
Deposits mail in post office after returning from route.
Other related duties.

SOME PERSONAL QUALIFICATIONS

Pleasant manner and effective way of dealing with people.
Familiarity with postal laws, regulations, and procedures and knowledge of the various areas of the city.
Willingness to work outdoors in all kinds of weather.
A sense of pride in performing his job well.

TRAINING

Must pass written test conducted by U.S. Civil Service Examiners.
Positions filled from highest grades on the register.

THE DISTRIBUTION CLERK (MACHINE)

The machine distribution clerk operates an electric letter sorter.

DUTIES

Operates a sorting machine that is programmed to sort and separate mail.
Operates a keyboard similar to a typewriter.
Reads addresses as he punches the key on the machine that prints a code indicating how the letter is to be sorted. (Reads the middle line on incoming mail, and the last line on outgoing mail.)
Works as the letters are fed into the machine automatically.
Punches codes that cause letters to separate and fall into correct bins, according to city, area code, or other planned instructions.

SOME PERSONAL QUALIFICATIONS

High degree of accuracy (98%) in operating the machine. Sorting speed for incoming letters is 60 per minute.
Mechanical ability; good hand and eye coordination.
Willingness to perform same job repeatedly and to work under pressure.

TRAINING

Basic training in post office.
Special training in operating the electro-mechanical letter sorter.

THE MAILHANDLER

The mailhandler loads, unloads, and moves bulk mail.

DUTIES

May operate the Mark II facer-canceler m a c h i n e – the machine used for canceling letters.
May stack canceled letters into trays which are put into "trams." (A tram is a wagon-like vehicle used to carry the mail from one area to another.)
May take the letters off the machine when it reaches a certain area.
May unload mail cars or trailers when they reach certain distribution points.

SOME PERSONAL QUALIFICATIONS

Mechanical ability; good hand-eye movement.
Ability to perform work quickly and accurately.
Ability to follow instructions.
Good physical health; ability to work well with other people.

TRAINING

Must pass Civil Service Examination.
Position is filled from the top names on the register or list of applicants.

MOTOR VEHICLE OPERATOR

The motor vehicle operator operates a mail truck on a regularly scheduled route to pick up bulk mail.

DUTIES

Goes to one or more stations at a scheduled time to pick up mail that has been processed.
Assists in the loading and unloading of the bulk mail.
Goes from station to station on regularly scheduled stops. (Number of stops depends on volume of mail.)
Uses two-way radio to give notice that truck is filled so that relief truck can take over and complete the scheduled route.
Performs related duties.

SOME PERSONAL QUALIFICATIONS

Good physical condition.
Skill in handling large volumes of mail.
Ability to follow instructions and to get along with all types of people.
Willingness to work in all kinds of weather conditions.
Accuracy in handing mail; good judgment.

TRAINING

Must pass Civil Service Examination.
As in other positions, the job is filled from the top names on the register.

Police Department

POLICEMAN

The policeman has the responsibility of protecting the life and property of the community, town, or city in which he works.

DUTIES

Performs some or all of the following duties at various times:
Directs traffic during rush hours and at times or places where traffic is unusually heavy.
Patrols streets to prevent crime and disturbance of the peace.
Arrests violators of laws, such as those speeding or other traffic offenders, persons breaking and entering a building, etc.
Investigates crimes such as burglary, disturbance of the peace, etc.
May sometimes administer first aid in emergencies and may sometimes assist in rescue operations. Often rescues household pets.
Spends time looking for ways to prevent crime; reports conditions that could endanger public life, such as burned out street lights.

SOME PERSONAL QUALIFICATIONS

An interest in protecting life and property, preventing crime, and playing a leading part in the community.
An understanding of the need for laws and a deep respect for persons who enforce them.
A sense of responsibility; good judgment; honesty; a willingness to learn.
Neat appearance and a likable personality.
Must be 21 years old to apply.

TRAINING

High school graduation.
Tests to prove eligibility, followed by an intensive training course of 10 1/2 weeks.
Continuous training throughout service career in vocational technical centers, junior colleges, or police academies.

TRAFFIC POLICEWOMAN

The traffic policewoman has the responsibility of getting children to and from the school safely at the beginning and end of a school day.

DUTIES

Directs children as they cross traffic or street to enter schools.
Has responsibility of getting children into the schools safely.
Knows particular crossing involved; knows how many children can cross street before a traffic light changes.
May sometimes stop traffic to insure safe passage of students.
Instructs parents who wait in the wrong traffic lanes.

SOME PERSONAL QUALIFICATIONS

Resident of community in which she works, preferably a mother.
Intense interest in children and a desire to render community service.
Willingness to work in all kinds of weather.
Ability to get along with both children and adults; good judgment and patience.
No record of arrest.

TRAINING

On-the-job training.
A short course in traffic control in a recognized training program.

DETECTIVE INVESTIGATOR
or
DETECTIVE LIEUTENANT

The detective lieutenant, or detective investigator, commands a squad of detectives responsible for investigations relating to homicide, burglary, larceny, auto theft, robbery, vice and fugitives.

DUTIES

Commands a squad of detectives, maintains their morale, and reviews their work.
Plans, directs, and assigns duties to other detectives.
Takes part in the more difficult investigations; gives instructions for other officers to follow.
Prepares and supervises the records and reports that pertain to police activities in which he takes part; also reviews reports prepared by those under his command.
Uses a knowledge of criminal laws as they apply to the arrest and prosecution of persons committing misdemeanors and crimes.
May have to apply first aid on some occasions.
Performs related work as required.

SOME PERSONAL QUALIFICATIONS

Ability to plan, assign, organize and supervise the work of others.
Ability to express ideas clearly and concisely both in talking and in writing.
Knowledge of the techniques and procedures used in investigations.
Ability to obtain information through interview and questioning and to decide on the proper police action.
Ability to quickly see all sides of a situation and to decide on a course of action that involves the least danger.

TRAINING

Graduation from high school or vocational school.
Training in police work, preferably in a supervisory manner.

FINGERPRINT TECHNICIAN
or
IDENTIFICATION AND RECORDS TECHNICIAN

The identification and records technician, or fingerprint technician, performs technical police work in preparing, identifying, and maintaining criminal identification records; he also works in areas relating to finding and preserving evidence.

DUTIES

Takes fingerprints and classifies, files, and identifies them.
Fingerprints suspects, prisoners, and job applicants; classifies and files fingerprints; searches files for prints.
Develops, prints, and enlarges fingerprints and other photographs.
Visits crime scenes, searches for evidence of fingerprints, and lifts fingerprints.
Prepares fingerprint cases for court and occasionally gives testimony as an expert witness.
Performs other related work.

SOME PERSONAL QUALIFICATIONS

Skill in taking, classifying, identifying, and filing fingerprints.
Interest in photography and the operation of photographic equipment.
Ability to understand and follow oral and written instructions.
Accuracy; good judgment; creative ability.

TRAINING

Graduation from high school or vocational school.
Approved course in police identification techniques.
Experience in technical identification work helpful.

RADIO OPERATOR AND/OR POLICE DISPATCHER

The radio operator (police dispatcher) receives and sends messages in a police radio center.

DUTIES

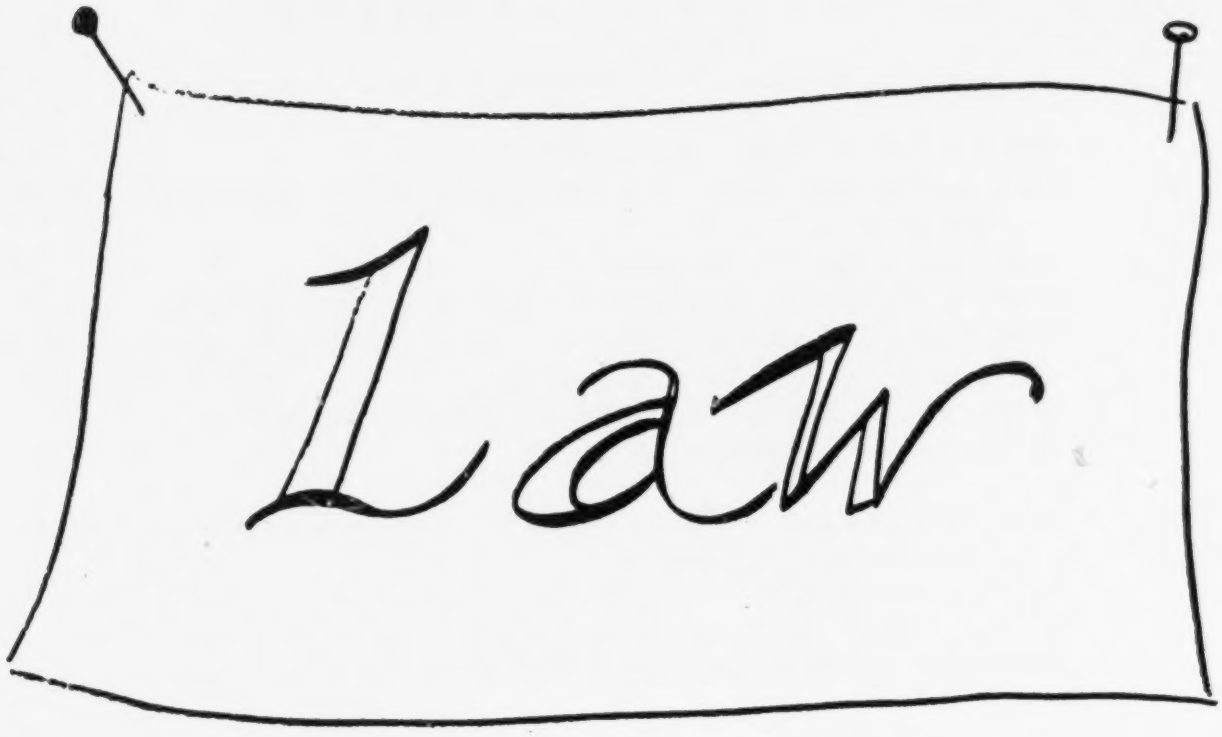
Operates two-way radios and related equipment.
Sends and receives messages to and from radio and patrol vehicles promptly and accurately.
Makes minor repairs to equipment when necessary.
Performs work in accordance with regulations of the police department.
Dispatches patrol cars and other vehicles to emergencies within certain districts; keeps a radio log or record.
Relays criminal information to other law enforcement agencies.
Broadcasts police communications.

SOME PERSONAL QUALIFICATIONS

Knowledge of radio transmission procedures and knowledge of the various streets and areas of the city.
Ability to act quickly and correctly in emergencies.
Ability to speak clearly and distinctly.
Knowledge of English and mathematics; ability to keep records.

TRAINING

High school graduation.
Specialized training at a vocational-technical center, junior college, or police academy, in the operation of radio transmitting equipment, teletype, and computerized crime information systems equipment.
Some experience with or knowledge of police work.


Law

JUDGE

The judge (shown in "Countdown to the 70's") is the official of the court who presides over a criminal trial or a civil case and sees that it is conducted orderly and properly.

A criminal trial is concerned with the trial of a person or persons accused of committing a crime such as robbery, murder, etc.

In a civil court, the judge presides over a case in which it must be decided whether or not a person has committed a wrong or broken a promise that causes him to have to pay damages to the injured party. (For example, the case may involve a claim for damages caused by an automobile accident.)

DUTIES

Presides over trial; keeps order in court.
May order someone from courtroom for improper behavior.
May settle disputes between lawyers when they disagree on a legal point.
Decides whether or not evidence (usually the answers of witnesses) may be accepted, if and when one of the attorneys objects.
Instructs the jury as to what the law is in relation to the case being tried and sends jurors to jury room. (The jury has the job of listening to all the facts given by the persons questioned by attorneys. Then, based on what they have heard, the jurors decide whether or not an accused person is guilty or innocent of committing a crime.)
Gives his decision about the sentence, or punishment, when a person is declared guilty.
May perform other duties in one or both courts.
Spends hours studying law and doing research.

SOME PERSONAL QUALIFICATIONS

Good judgment; excellent character; high degree of intelligence.
A questioning mind; willingness to spend many hours studying law.
A desire and eagerness to make a fair decision in matters pertaining to law.
Ability to supervise others and maintain order.

TRAINING

High school graduation.
College degree (4 years).
Graduation from an approved law school.
Admission to state bar by passing a written examination.
Election by a vote of the people.

LAWYER

A lawyer is a person who gives advice to others about their rights and responsibilities, according to the law, and acts for them in court when necessary.

DUTIES

Talks with clients in his office and gives them legal advice.
May draw up legal documents, such as wills, property deeds, etc.
Collects evidence concerning cases, or directs assistants to do research that aids in the preparation of a case.
Gathers information from the records division in a courthouse and studies law books for case histories and decisions.
May handle legal matters for the large companies and corporations.
May handle cases involving criminal law, dealing directly with someone who has committed a crime.
May work with private law, handling lawsuits involving claims for damages, broken contracts, etc.
May perform many other varied and related duties.

SOME PERSONAL QUALIFICATIONS

High degree of intelligence and the ability to express his thoughts clearly and effectively.
Understanding of human nature and ability to deal with all types of people.
Desire to learn and a willingness to do continuous studying throughout his career.
Good moral character; keen sense of responsibility; good judgment.

TRAINING

High school graduation.
Six or seven years required to complete legal training — usually 4 years of college plus 2 or 3 years training in a recognized law school.
Must pass a bar examination before being allowed to practice law.

COURT REPORTER

The court reporter makes word for word records of all oral proceedings in the courtroom.

DUTIES

Takes testimony, final reviews of cases by attorneys, the charges made to the jury by judges, and the final sentencing.
Takes down manually, by using shorthand or machine, every word that is spoken.
Does not take conferences between judges and attorneys that are "off the record."
Sometimes goes with officials to the scenes of crimes and accidents in order to record testimony.
Transcribes his notes or reads them into dictating machine for typist to transcribe.

SOME PERSONAL QUALIFICATIONS

Ability to concentrate and work with speed as well as accuracy.
Skill in taking notes at a very fast speed by hand or by operating recording machine.
Ability to keep silent where matters are strictly confidential.
Good health, including good vision and good hearing.
Ability to work well under pressure.

TRAINING

High school diploma or the equivalent.
Training in shorthand, typing, etc., in a course that meets the requirements of the National Shorthand Reporters Association.

LEGAL SECRETARY

The legal secretary performs general office work and relieves the lawyer by handling many administrative duties.

DUTIES

Opens and sorts mail; pulls briefs or information about the case from files and places it on lawyer's desk with letters from clients.
Types forms necessary for setting up the various pleadings in courts.
Knows legal terms and understands how the courts operate.
Works with speed and accuracy; checks work carefully for errors.
Keeps a supply of court forms on hand.
Types legal documents of all kinds and understands the language used.
Maintains a good relationship with clients.
Performs routine duties such as answering telephone, handling correspondence, making appointments, filing.

SOME PERSONAL QUALIFICATIONS

Pleasant personality; ability to deal with all types of people.
Neat, attractive appearance; good telephone voice.
High degree of accuracy, good knowledge of English grammar, and speed in performing work.
Good judgment; ability to make wise decisions.

TRAINING

High school graduation.
Secretarial training in high school, private business school, or technical school; or,
College degree (4 years) with major in business education.

FILE CLERK

The file clerk files correspondence and various kinds of records and papers in a s t r i c t orderly manner and sees that files are kept up to date.

DUTIES

Collects all correspondence to be filed, making sure to put each item in its proper place.
Operates a system for locating items that may be needed at a later date.
Keeps a file on each client, including correspondence, briefs, reports, cancelled checks, or any paper or record that applies to the case.
Locates and takes out of the files materials to be used and replaces them when work has been completed.
Checks materials in and out of the files to avoid loss.

SOME PERSONAL QUALIFICATIONS

Cheerful personality and neat appearance.
Ability to work under pressure and to stand on feet for long hours.
A knack for keeping materials neat and orderly.
Accuracy; ability to read rapidly and make quick decisions.
Knowledge of the rules of filing.

TRAINING

High school graduation.
Office training in high school, at a technical school, or a recognized business school.

RECEPTIONIST

The receptionist receives and gives information to clients and other callers in the lawyer's office.

DUTIES

Greets a person as he enters the office, asks his name and that of the lawyer (when there are several) he wishes to see.
Directs the caller to the appropriate office or, when he must wait, asks that he be seated.
Attempts to learn the purpose of the caller's visit; can sometimes handle the business without interrupting lawyer.
Sometimes necessary to turn caller away in a pleasant diplomatic manner.
Makes appointments and answers questions.
Answers telephone and performs general office duties.

SOME PERSONAL QUALIFICATIONS

Neat and attractive appearance; pleasing manner.
Ability to deal with public in a way that gives friendly impression to persons visiting the firm.
Ability to listen to problems of others and to give correct information.
Good judgment; accuracy, and dependability.

TRAINING

High school graduation, with ability to type.
College training or course at business or technical school helpful.

Performing Arts

ACTOR OR ACTRESS

An actor (or actress) is one who acts a part in a theatrical production on the stage, in motion pictures, or on radio or television.

DUTIES

Must memorize lines (sometimes many lines) and know their cues. (For radio, the scripts or lines can be read.)
Often spends hundreds of hours rehearsing.
Must know how to control and use his or her voice and body to get the desired effects.
May work for many weeks playing the same role every night (especially in stage productions).
May rehearse for weeks before a production, also during the days when a show is in progress.

SOME PERSONAL QUALIFICATIONS

An outstanding talent for acting, along with a good memory that enables him to memorize hundreds of lines.
Pleasing voice that can be clearly understood.
Intelligence; self-confidence; good health.
Willingness to work hard and to keep trying in spite of hard luck.

TRAINING

High school diploma.
College degree (4 years) with special training in speech, drama, or similar areas.

DANCERS

The professional dancer is a person whose occupation is dancing with a group or in solo performances.

DUTIES

Dancing is the art of expressing one's feelings and ideas through rhythmic body motions made in time to music. The actions involved may vary with the different types of dancers.

Ballet dancers are classical dancers whose training includes established patterns of movements. Their dances usually involve an interpretation of a particular theme or story. This field requires long, continuous, and hard training.

Modern dancers (sometimes called classical dancers) use a freer style of movement than ballet dancers. They use facial expressions as well as body motions to show moods and feelings.

Tap dancers display rhythm by dances that feature tapping the feet or toes to music.

Acrobatic dancers perform dances involving gymnastic accomplishments.

All dancers may perform in groups in musical shows or in similar type productions; some may do special numbers and top artists may do solo work. Dancers may perform on the stage, screen, television, and in various places of entertainment.

Dancers may also work as teachers, directors, dance therapists (work with mentally retarded), and choreographers (who create new dance routines).

SOME PERSONAL QUALIFICATIONS

Excellent health; average height and body build; attractive appearance.
A talent or aptitude for dancing; good feet and arches.
Willingness to practice or rehearse for long hours.
Ability to work well with others.

TRAINING

High school graduation.
Training in a professional dancing school beginning at an early age.
College degree (4 years), along with experience, required for teachers and some other areas.

MUSICIANS

A musician is usually thought of as a performer who plays one or more musical instruments in an orchestra, jazz band, or other group, or in individual concerts.

DUTIES

The work of a musician can fall into the following classifications:

Performers, in addition to those musicians who play instruments, may include conductors who direct performances and chorus masters and choir masters who direct various kinds of group singing.

Composers form another group of musicians. They compose and write music, according to the particular taste or talent each possesses. An arranger, also in the field of writing music, changes or adapts music to suit various singing or playing groups or individuals.

Teachers, including those who give private lessons, public and private school teachers who give group instruction, and teachers in colleges are considered musicians.

Music therapy, developed in recent years, offers an opportunity for specially trained musicians to work with h a n d i c a p p e d and mentally retarded children.

Some other positions that a musician may hold include the following:
music critic; music editor; music director in radio, television, or motion pictures; technician who tunes and repairs fine instruments.

SOME PERSONAL QUALIFICATIONS

A special musical talent, along with a sense of rhythm and harmony, and the ability to interpret and express the meaning of music.

Good finger movement and muscular coordination.

Willingness to practice for long hours and to work until a particular job is mastered successfully.

Patience; ability to work with others; good disposition.

TRAINING

High school graduation.

Specialized training beginning early in life required for most musicians.

College degrees (4 years) required for teachers, librarians, therapists. Some positions require additional college training.

SINGER

A professional singer has the talent and ability to express the feeling and meaning of music by means of the human voice.

DUTIES

The work of a singer varies with the type of music he sings.
Concert and opera singers may prepare for weeks for one performance and spend hours in daily rehearsal; may make tours throughout the country and sometimes abroad, very often repeating the same program.
Often make recordings for sale to public.
Singers may also perform in churches, synagogues, musical comedy, choruses, or professional choral groups; rehearsals required before each performance.
Popular singers may perform in movies, on stage, radio, TV, night clubs, and other places of entertainment; require less rigid schedule than classical singers.
Make and sell records.
Singers may teach in elementary and secondary schools and in college or a music conservatory; may give private lessons in voice training.

SOME PERSONAL QUALIFICATIONS

Broad knowledge of music and a natural ability to sing; ability to dance helpful, as the two talents are often combined.
Pleasing personality and attractive appearance; ability to communicate with people.
Willingness to work hard for long hours.

TRAINING

High school graduation.
Classical singers (opera, etc.) require formal voice training, which begins as a person matures; training in a music conservatory, Department of Music in a college, or private training from a qualified teacher.
Popular singers very often have no formal training, but work to develop their own personal styles of singing.
Teachers receive bachelor's degree in music or music education; sometimes required to have a master's degree (5 years).

Child
Care

DAY CARE DIRECTOR

The Day Care Director is responsible for the management of a Day Care Center. (Sometimes she is the owner.)

DUTIES

Supervises the work of the total staff connected with the center.
Arranges schedules and plans staff meetings.
Orders the equipment and supplies that are needed for the center.
Greets visitors and parents and works with volunteer workers.
Plans menus and supervises food service.

SOME PERSONAL QUALIFICATIONS

Leadership ability; good judgment; ability to make decisions.
Good understanding of human nature; ability to organize the work of others.
Love of children and ability to deal with their problems.

TRAINING

High school graduation.
College degree (4 years).
Master's degree (1 or 2 years of additional college training).
Experience in working with groups of children – preferably work as a head teacher.

PROGRAM DIRECTOR

The program director of the Day Care Center is responsible for planning and developing a program for the center.

DUTIES

May involve other workers in planning and developing a program or programs for the Day Care Center.
Explains or interprets the actions or behavior of children to members of the staff.
Sometimes orders play materials and equipment.
Works closely with the teachers on the program.
Has the responsibility of on-the-job training of staff members.

SOME PERSONAL QUALIFICATIONS

Ability to organize, supervise, and plan work for other people.
Understanding of c h i l d r e n and ability to recognize, understand, and explain their actions.
Good judgment in making decisions.
Pleasing personality; ability to work well with others.

TRAINING

High school graduation.
College degree (4 years) with study in child development.
Additional advanced college training preferred.

HEAD TEACHER

The head teacher in the Day Care Center helps plan the program for the children and sees that it is carried out.

DUTIES

Has the responsibility for a specific group of children.
Keeps up with the supplies and equipment.
Arranges conferences with parents.
Directs and supervises the work of the assistant teacher.
Keeps records on each individual child.
Plans and carries out the program developed for a group of children.

SOME PERSONAL QUALIFICATIONS

Good mental and physical health.
Genuine love of children and ability to work with all types.
Sympathetic nature, patience, and understanding.
Pleasant disposition and ability to adjust to all kinds of circumstances.
Quick, alert mind.

TRAINING

High school graduate.
2 years of technical training in the field of child development.

ASSISTANT TEACHER

The assistant teacher in the Day Care Center assists the head teacher in performing the duties necessary to carry out a planned program.

DUTIES

Works closely with the head teacher in the various activities of the center.
Helps to plan a program suitable for the group of children with which she deals.
Works to establish and keep a good relationship with parents.
Helps the teacher to keep records about the children.

SOME PERSONAL QUALIFICATIONS

Ability to follow directions and to work well with others.
Love of children and an understanding of their needs.
Good judgment; patience and sympathy in dealing with all types of children.
Good mental and physical health; ability to work under pressure.

TRAINING

High school graduation.
Special training in child development, either in high school or at a technical school.

CHILD CARE AIDE

The child care aide performs various duties to assist in carrying out the p r o g r a m of the Child Care Center.

DUTIES

Prepares work materials for teachers and workers to use with children.
Provides or sets up the various kinds of equipment needed, such as outdoor play equipment, art materials, etc.
Cleans up the work and play areas.
Helps the children in activities such as having snacks, cleaning up, and taking their naps.
Performs other related duties to help carry out the center's program.

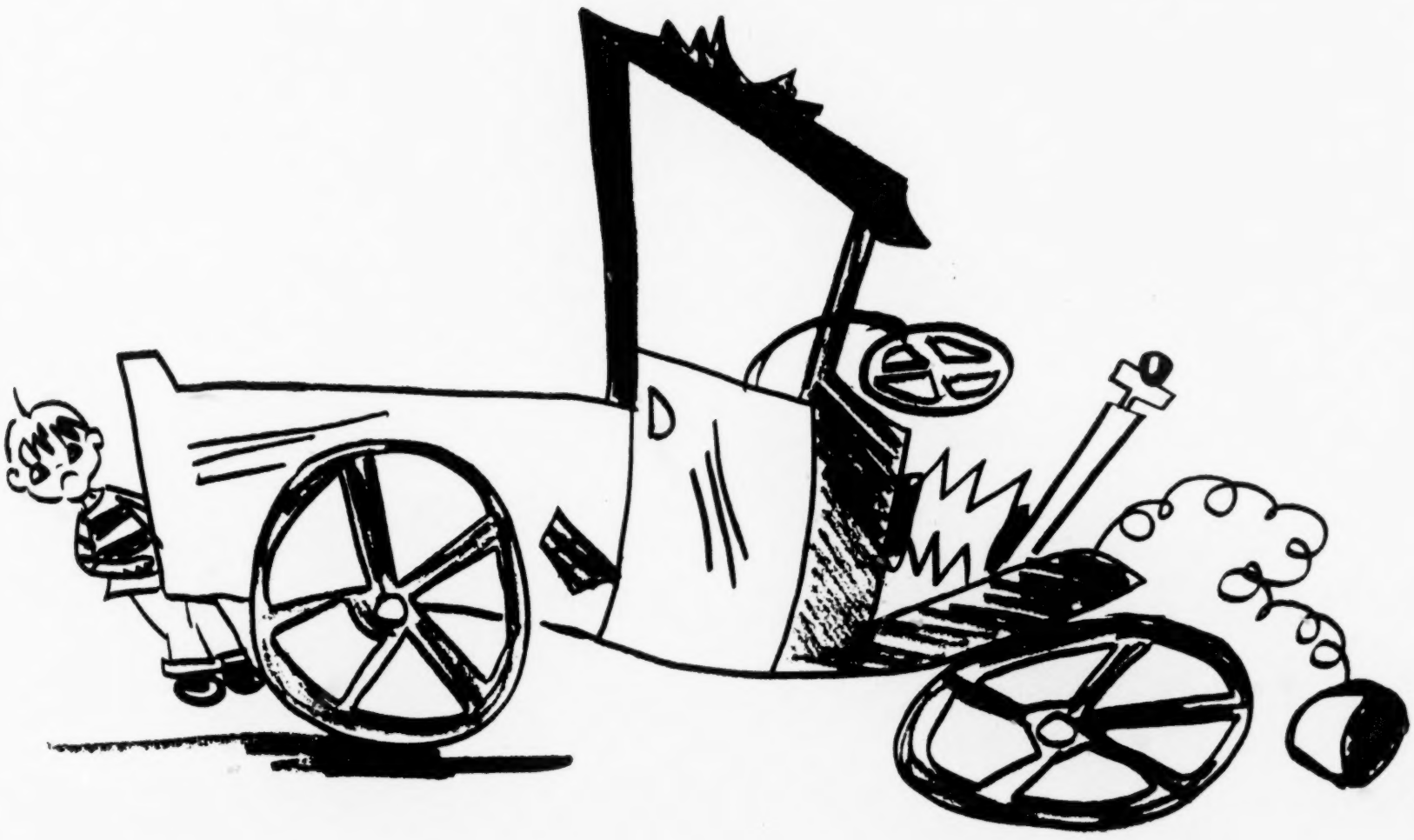
SOME PERSONAL QUALIFICATIONS

Pleasant personality; ability to communicate with children.
Good physical health; ability to work under pressure.
Ability to follow instructions and to work well with others.
Patience and understanding.

TRAINING

High school graduate.
Continuous training through short term courses.

Insurance



THE INSURANCE AGENT

The insurance agent sells policies that protect individuals or businesses against future losses involving life or property.

DUTIES

Determines the need for insurance coverage and advises each client as to the best type of insurance for his needs.
Studies the many types of insurance so that he will be able to advise clients properly.
Explains insurance benefits in language people can understand.
Arranges for the company to issue the policy to the client.
Arranges for any desired changes that the policyholder wishes to make.
Tries to assist in the fair and prompt handling of any claim a policyholder may have.
Performs other related duties.

SOME PERSONAL QUALIFICATIONS

Salesmanship ability; a knack for meeting and dealing with many different people.
Ability to explain policies in a manner that is easily understood.
Desire to be of service to others.

TRAINING

High school graduation.
Company training program.

THE INSURANCE UNDERWRITER

The insurance underwriter has the responsibility of reviewing applications and determining whether or not a particular person or property should be insured by the company.

DUTIES

Reviews each risk presented to him by the agent to determine if it is one the company should insure.
Collects additional information concerning a risk to assist him in deciding whether or not it is acceptable.
Advises agent about the changes that could be made so that the risk would be more acceptable.
Reviews a risk from time to time to be sure it is still acceptable.

SOME PERSONAL QUALIFICATIONS

Ability to look at facts and make a wise decision.
Ability and desire to work with detailed materials.
Knack for communicating with other employees and ability to express opinions in a diplomatic way.
Understanding of human nature.

TRAINING

High school graduation.
College degree (4 years), or Associate degree with specialization in this area.
Company training program.

THE CLAIMS ADJUSTER

The claims adjuster examines a loss that has been claimed and determines, on behalf of the company, how much should be paid to the insured.

DUTIES

Receives first notice of a claim and arranges to gather facts that he needs.
Reviews insurance policy to find out what benefits are available to pay the loss.
Keeps records on the number and final results of each claim.

SOME PERSONAL QUALIFICATIONS

Ability to make fair decisions when dealing with claims.
Liking for doing detailed work.
Sense of responsibility when dealing with company's money.
Good judgment; patience; accuracy.
An inquiring mind.

TRAINING

High school graduation.
College degree (4 years).
Company training in the main and branch offices.

THE TYPIST

The typist operates a typewriter for the purpose of typing various types of materials needed by the insurance company. He or she may also perform general office duties.

DUTIES

Types policies, claims forms, renewals or cancellations of policies and other forms required by an insurance company.
Sometimes handles general correspondence, usually using a dictating machine.
Proofreads typed copy to be sure that typing is accurate.
Checks facts that appear on the various forms and reports.
May operate other types of office machines such as adding machines and calculators.

SOME PERSONAL QUALIFICATIONS

Ability to type accurately as well as rapidly.
Neat, attractive appearance; ability to work well with others.
Patience; ability to work well under pressure.

TRAINING

High school graduation.
Clerical training in high school, a technical school, or a private business school.

FILE CLERK

The file clerk (in "Countdown to the 70's") files the correspondence and the various records and forms that contain information needed for the company's operation.

DUTIES

Sets up a workable system for filing the incoming correspondence as well as copies of letters written to clients.
Files the copy of a policy along with correspondence, renewal or cancellation, and all other forms pertaining to each individual policy.
Keeps a record as material is removed from a file so that it will not be misplaced.
Operates a plan for locating materials that may be needed in the future; checks on papers that are overdue.
Duties may differ with the size of the office.

SOME PERSONAL QUALIFICATIONS

A knack for being orderly, neat, and tidy.
Ability to work with speed and accuracy in locating materials; ability to read rapidly.
Pleasing personality; attractive appearance.
Ability to take criticism.

TRAINING

High school graduation.
Clerical course in high school, a technical school, or a private business school.

THE MAIL CLERK

The mail clerk handles the many letters and packages that are sent or received by the insurance company.

DUTIES

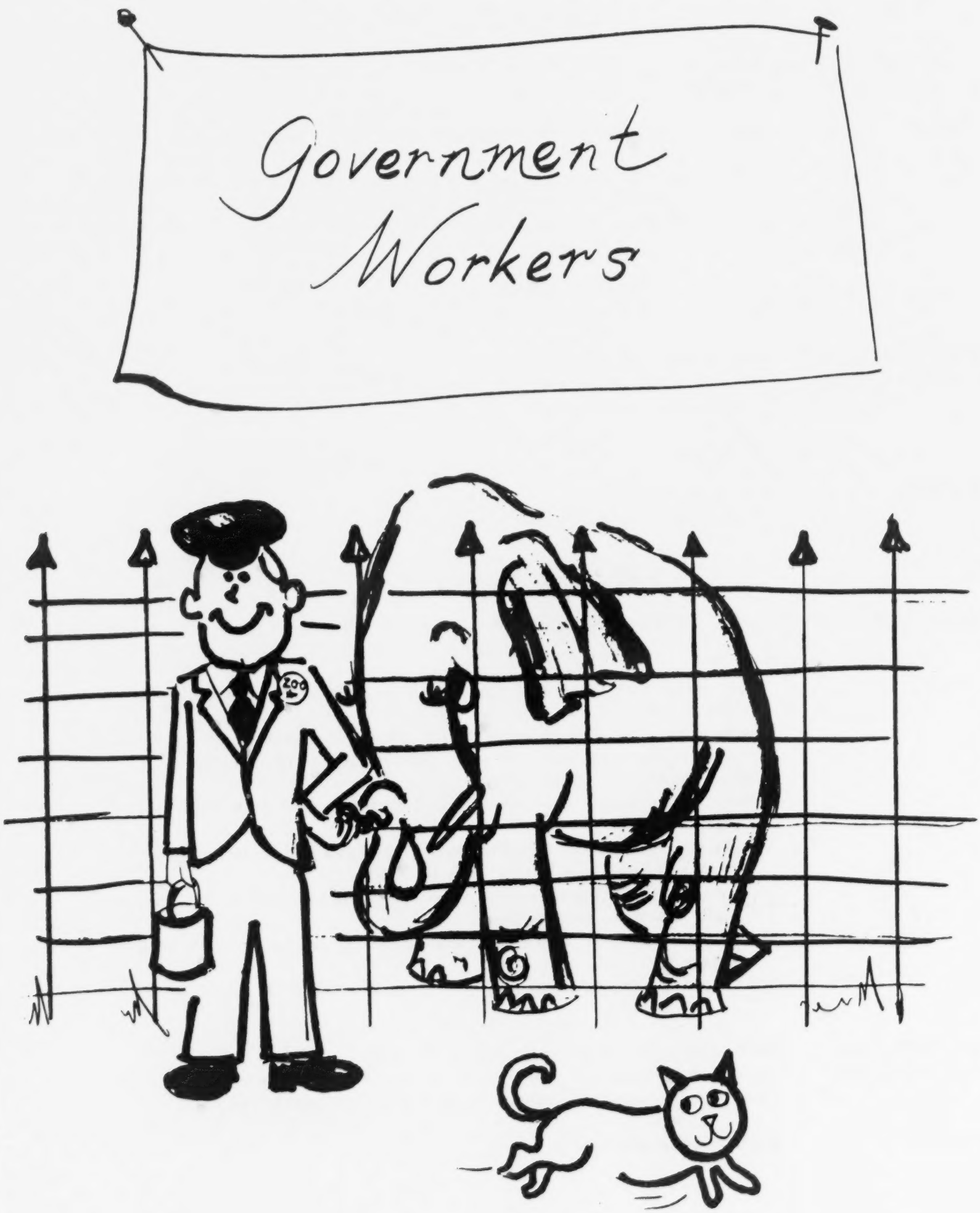
Opens bundles of letters and packages that come in and takes them to a sorting rack.
Checks each letter and places it in the proper compartment of the sorting rack. (Each compartment is for a different person or department.)
Delivers mail to the various offices.
Collects outgoing mail from offices and departments and takes it to the mail room.
Weighs mail on a special scale and feeds it through a postage meter where it is stamped. Sometimes stamps them by hand.
Sorts mail according to where it is to go – local, in state, out of state, and air mail; sometimes sorts by states.
Sometimes takes care of packages that are to be mailed as well as those received.
Takes care of inter-office correspondence (mail between the company offices or departments).

SOME PERSONAL QUALIFICATIONS

Polite and courteous manner; pleasant personality.
Good health; unusual physical strength; willingness to stand or walk most of day.
Good memory; accuracy; ability to work with hands quickly and easily.

TRAINING

High school graduation.


Government
Workers

DEPUTY DIRECTOR OF PERSONNEL

The deputy director of personnel has the responsibility for performing many major duties concerned with employing workers for the city, including assisting the director of personnel in the general operation of the department. (Personnel includes persons employed in any work, business, or service.)

DUTIES

Helps to organize, direct and review the work of all divisions of the department.
May supervise the employment and placement operations of the personnel.
Meets with department heads to explain the operation and policies of the personnel department.
Plans, assigns, and reviews the work of the professional and technical staff.
Handles correspondence with other departments or with the public about information pertaining to the department or its policies and regulations.
Makes decisions about many personnel matters, based on his or her knowledge of good management and merit system principles. (The merit system is used as a basis for employing workers.)
May attempt to recruit possible workers among graduates of high schools, technical schools, and other training institutions.
Sees that persons who are employed are placed on appropriate jobs.

SOME PERSONAL QUALIFICATIONS

Thorough knowledge of the laws, rules, and policies related to operating the personnel program.
Good judgment and the ability to make wise decisions based on his or her knowledge of the activities of the department.
A better than average ability to work with people and a keen understanding of human nature.
Ability to express ideas clearly, both orally and in writing.
Thorough knowledge of modern office practices.

TRAINING

High school graduation.
College degree (4 years) with special study in personnel work or an area that would qualify one to work successfully in this occupation.
Experience at the supervisory level.

DUPLICATING MACHINE OPERATOR

The duplicating machine operator manages offset printing and duplicating machines that reproduce copies of written, typed, or printed material.

DUTIES

Places form plates or stencils on a duplicating machine and makes a specified number of copies.
Assembles printed material into pamphlets, brochures, folders, or any other planned arrangement.
Cuts, binds, staples, or fastens together the duplicated materials.
Burns and develops plates from which printed materials are copied.
Performs related duties as required.

SOME PERSONAL QUALIFICATIONS

Mechanical aptitude; ability to use hands quickly and easily.
Good eyesight; accuracy; neatness.
Physical strength; willingness to perform repeated operations for long periods.
Knowledge of operation of duplicating machines; knowledge of papers, inks, etc.
Ability to follow instructions.

TRAINING

High school graduation.
Clerical training and/or special training in the operation of offset duplicating equipment.

ZOO DIRECTOR

The zoo director supervises and directs the operation of a large municipal zoo.

DUTIES

Has responsibility for showing and caring for the animals, reptiles, etc.
Plans diets, supervises feeding and the purchasing of food.
Recommends the purchase or trade of certain animals or specimens.
Finds out the best methods of cleaning the zoo, etc., to protect both the animal and the viewing public.
Prepares articles and speeches; makes radio and television addresses; assists in preparing the zoo guide book; performs any activities that will help to acquaint the public with the zoo.
Plans work of the zoo personnel.
Performs other related duties.

SOME PERSONAL QUALIFICATIONS

Knowledge of the needs and habits of animals found in a zoo; a genuine love of animals.
Thorough knowledge of practices in zoo management and the safety measures that are necessary.
Ability to work well with people on all levels.
Aptitude for displaying animals, etc., in an interesting manner.

TRAINING

High school graduation.
College degree (4 years) with major in zoology.
Supervisory experience in a zoo program.

ZOO ATTENDANT

The zoo attendant has the responsibility of caring for animals at the zoo and for keeping zoo facilities clean.

DUTIES

Prepares food and feeds animals, reptiles, birds, etc., at certain scheduled times.
Checks animals for any signs of illness or trouble and reports to his superior.
Cuts meat, cleans fish, cuts bread and vegetables that are fed to the animals; also gives them water.
Cleans and disinfects their living areas.
Answers questions in regard to the zoo and the animals.
Performs related duties.

SOME PERSONAL QUALIFICATIONS

Knowledge of the care and habits of domestic and wild animals.
A genuine liking for animals and the ability to work with wild, delicate, and sometimes dangerous animals.
Ability to deal pleasantly with people.
Good judgment; patience; a sense of responsibility.

TRAINING

Experience in custodial care of animals.

EQUIPMENT OPERATOR

The equipment operator is responsible for the operation of wheeled vehicles such as trucks, tractors, and other equipment.

DUTIES

Operates, services, and makes minor repairs on equipment used for transporting workers or animals.
Usually works under the supervision of a foreman.
May operate various kinds of trucks – body, panel and dump trucks, winch trucks, trucks with spreaders, etc.
May operate large tractors with landscape or mowing attachments or light mechanical sweepers.
May operate heavier and more complex construction equipment under supervision.
Performs related duties.

SOME PERSONAL QUALIFICATIONS

Ability to follow directions and to work well with others.
Mechanical aptitude; skill in the operation of vehicles and light equipment.
Ability to prepare simple records.
A willingness to perform various duties and to take pride in doing a good job.

TRAINING

Eighth grade education; high school graduation preferred.
Experience in operating automotive equipment; possession of a valid operator's license.

The Car in your Future

MATERIALS HANDLER

The materials handler may perform one or more of a number of operations used in handling materials as they are unloaded and taken to various parts of the assembly plant.

DUTIES

May operate a fork lift in the unloading of materials.
May unload materials by hand.
May check or count materials as they are unloaded.
May use a grip-tow – a battery operated device with two forks (used where there is not enough room for a fork lift).
May transport materials by tug – a four-wheeled vehicle that is hitched to a dolly and pulled wherever it needs to go.

SOME PERSONAL QUALIFICATIONS

Good physical strength; ability to lift heavy items.
Care in handling of materials; good judge of distance, size and shape.
Ability to work well with others.
A sense of responsibility and pride in doing one's job well.

TRAINING

High school graduation is desirable.
Experience or on-the-job training.

SPOT WELDER

The spot welder uses a spot welding gun to perform a number of operations necessary in assembling a car.

DUTIES

Attaches the floor pan to the body. (Body is first placed in a device with numerous clamps, called "buck" clamps, which hold the metal parts firmly.)
Uses a welding gun to spot weld the floor pan to the body side of the door opening.
Uses another welding gun to spot weld the fender apron to the top portion of the front part of the automobile.
Places a hoist, or lift, in the door opening, takes the body out of the clamps and places it on the delivery line.
Performs more than 30 spot welds in this particular operation.

SOME PERSONAL QUALIFICATIONS

Mechanical aptitude; willingness to handle same routine for hours.
Ability to follow instructions and to work well with others.
Pride in doing a good job.
Good health; patience; accuracy; sense of responsibility.

TRAINING

High school graduation is desirable.
On-the-job training.

WHEEL SPRAY PAINTER

The wheel spray painter has the responsibility of painting the wheels on cars that are being assembled.

DUTIES

Spins the wheels in order to get complete paint coverage.
Uses 14 different colors, with a different hose for each color.
Reads information on the wheel to find out which color to use.
Paints 250 wheels per hour.

SOME PERSONAL QUALIFICATIONS

Knack for performing repeated operations with accuracy and skill.
Ability to follow instructions.
Cheerful disposition and an aptitude for working with others.
Good health, good eyesight, and a good sense of color.
Ability to work with hands quickly.

TRAINING

High school graduation.
Spray paint training (3-6 months).

INDUSTRIAL ENGINEER

The industrial engineer (shown in "Countdown to the 70's") is responsible for deciding the number of persons that are needed to build cars at a certain rate per hours.

DUTIES

Studies the work of each operator and measures the time necessary to perform each part of the job.
Determines amount of work each operator on the line is expected to do in order to complete the job.
After making a time study of each operation, he uses a calculator (office machine) to determine the total time for each portion of work.
Plans ways in which operation can be improved.

SOME PERSONAL QUALIFICATIONS

Above average intelligence; high ability in science and mathematics.
An interest in how or why things work and how they can be improved.
A creative mind; ability to see things and understand what he sees.
Ability to think in terms of people and in the science of math.
Good judgment; ability to stick with a job until it is done.

TRAINING

High school graduation.
College degree in industrial engineering (4 years).

WINDSHIELD INSTALLER

The windshield installer has the responsibility of properly installing windshields on cars as they pass through the assembly line.

DUTIES

Attaches round rubber vacuum caps (attached to a bar) to the windshield and by means of a hoist lifts it onto the body of the automobile.
Presses windshield into place after the vacuum press is attached to the windshield. (Operation is performed by two men.)
Fastens the two remaining clips at the bottom of the windshield with a power screw driver.
Repeats installation process after vacuum press is released.

SOME PERSONAL QUALIFICATIONS

Good hand and eye movement.
Ability to perform operation exactly and accurately.
Good judgment and sense of responsibility.
Ability to work well with others.
Willingness to perform repeated operations.

TRAINING

High school graduation.
On-the-job training.

WHEEL ASSEMBLER

The wheel assembler (in "Countdown to the 70's") assembles wheels to the bodies of automobiles as they move along the assembly line.

DUTIES

Removes tire and wheel assembly from the conveyor and places it into position on the front wheel drum of the automobile.
Puts the five lug nuts on a wheel at one time with a power wrench.
Places wheel on rear wheel drum, reloads the power wrench and fastens the wheel.
Places spare tire in the rear of the automobile for installation.

SOME PERSONAL QUALIFICATIONS

Good physical health; ability to do routine work at a rapid pace.
Accuracy; dependability; good disposition; patience.
Good hand and eye movement.
Ability to work under pressure and to get along with others.

TRAINING

High school graduation.
On-the-job training.

WATER TEST INSPECTOR

The water test inspector checks each car as it goes through a r i g i d three-minute test that resembles a tropical rainstorm.

DUTIES

Rolls windows up tightly and enters test area.
Checks all electrical equipment such as radio, lights, and horn.
Looks for leaks around windows and doors.
Makes notes of defects on a water leak location chart.
Spends three minutes in water spray test area, then drives out to check for trunk leaks.

SOME PERSONAL QUALIFICATIONS

Good eyesight; observance of details.
Ability to notice all parts that are involved in the test.
Excellent sense of responsibility and a pride in seeing that a product is produced correctly according to plans and specifications.
Patience; good judgment and dependability.

TRAINING

High school graduation.
Extensive job training and assembly experience.
Usually promoted to position from within the ranks.

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HORTICULTURIST

The horticulturist (in "Countdown to the 70's") has the responsibility for the propagation, cultivation, and care of plants in a greenhouse. (Propagation is the breeding of plants by planting seed or by cuttings.)

DUTIES

Grows all plants used in parks and other recreation areas.
Propagates (by seed, cuttings, etc.), cultivates and cares for native and tropical plants in the greenhouse and nursery.
Works in planting, transplanting, potting, and other care of plants and shrubs that require skilled knowledge in gardening and greenhouse methods.
Supervises and instructs laborers or gardeners who assist in the greenhouse operations.
Helps to decide on amount of plants or shrubs needed at a particular time.
Performs other related duties.

SOME PERSONAL QUALIFICATIONS

Extensive knowledge of all types of plants, how they grow, and the kind of care they require.
An aptitude for working with growing things and skill in handling them.
Patience and pleasant disposition.
Ability to work well with others.

TRAINING

High school graduation.
College graduation, specializing in horticulture or floriculture, plus one year's experience; or,
Any similar combination of education and experience.
Interview required for employment.

LABORER

The laborer (shown in "Countdown to the 70's") performs important duties that are necessary in the care and growth of plants and shrubs.

DUTIES

Assists the horticulturist in taking care of plants in greenhouses and nurseries.
Develops and cultivates beds for growing flowers.
Puts small plants, or seedlings, into pots, using a special potting soil; later transplants the seedlings.
Stakes and sprays plants; weeds flower beds outdoors and in greenhouses; grinds soil and mixes soil.
May drain, clean and fill ornamental pools.
Performs other related duties.
Works under the supervision of the horticulturist.

SOME PERSONAL QUALIFICATIONS

Good working knowledge of plants and of the general care they require.
Ability to work under supervision and to follow instructions.
Good health; ability to perform manual work.
Knowledge of the operation and care of sprayers, sprinklers, and greenhouse equipment.

TRAINING

On-the-job training.
Former experience helpful.

PARK CUSTODIAN

The park custodian takes care of a certain park area, including any buildings within the area.

DUTIES

Performs duties needed for taking care of the grounds, such as raking leaves, weeding, picking up trash, and mowing.
Has general cleanup duties necessary for the upkeep of buildings in the park area, such as mopping and sweeping.
Repairs and paints benches, tables and swings.
Usually works alone and sets up his own work schedule.
Works under supervision of parks maintenance superintendent or his assistant and receives instructions from them concerning projects for keeping up the park area.

SOME PERSONAL QUALIFICATIONS

Ability to use hand and power tools; knowledge of care required for shrubs and lawns.
Ability to follow instructions, both oral and written.
Good physical condition; willingness to work outdoors in all types of weather.
Good judgment; ability to make decisions.

TRAINING

High school graduation.
Experience in grounds and maintenance work.

RETAIL SALESMAN

The salesman (in "Countdown to the 70's") sells various items that are needed to keep things "green and growing."

DUTIES

Performs one or more of the following duties:
Sells flower and vegetable seeds over the counter.
Sells grass seed or sod, advising customer about the best kind of seed or grass sod to use for his particular soil or location.
Sells small flower and vegetable plants, also seasonal plants and shrubs of larger varieties (often sold in greenhouses or protected areas).
Sells garden equipment of all kinds – lawn mowers, sprayers, hedge clippers, etc.
Sells liquid plant food and all types of fertilizers.
Sells various kinds of shrubs and evergreens.
May sell other related items.

SOME PERSONAL QUALIFICATIONS

Self confidence; knowledge of the product or products he sells.
Initiative, desire for success, and an interest in the customers' needs.
A genuine liking for people and a friendly personality.
An attitude that "the customer is always right."

TRAINING

High school graduation.
College training helpful.

To look
Your Best

BARBER

A barber cuts and trims hair and performs a number of services that may improve the appearance of a customer.

DUTIES

Cuts or trims hair; shampoos hair and may also color or bleach hair.
Trims and shapes beards and mustaches.
Gives shaves, facials, scalp treatments and massages.
Advises customers about their hair styling; also gives advice about hair problems or difficulties.
Fits and takes care of wigs or artificial hair pieces.
Uses various tools such as scissors, razors, clippers, combs, tweezers, brushes, vibrators, and razor sharpeners.

SOME PERSONAL QUALIFICATIONS

Pleasant, courteous manner with better than average ability to get along with others.
Outgoing personality; ability to make his or her customers feel at ease.
Good hand and eye coordination and ability to use fingers and hands easily.
Neat, clean appearance; good health; willingness to stand on feet for long periods.
Desire to serve others and to do a good job.

TRAINING

High school graduation.
Training in a technical school or a private barber college.
Written and practical examinations must be passed in order to be a licensed barber.

RECEPTIONIST

The receptionist in a Cosmetology salon (Beauty shop) greets customers as they come in and performs various duties connected with the operation of the shop.

DUTIES

Makes appointments for customers, directing them to the proper place as soon as the operator is available.
Collects payments for services received by customers.
Keeps a record of amount received, usually crediting sums to the operators performing the services; sometimes assists with bookkeeping duties.
Schedules appointments for customers, often writing the date and time on a specially prepared card.
Answers telephone.

SOME PERSONAL QUALIFICATIONS

Ability to work congenially with others and to create a good impression for her employer.
Dependability; a sense of responsibility; good judgment in dealing with others.
Attractive appearance; patience.

TRAINING

High school graduation is preferred.
Clerical training helpful.
Position sometimes filled by a trained cosmetologist.

BEAUTY OPERATOR
(Cosmetologist)

The cosmetologist (beautician) is any person qualified to practice cosmetology in its entirety.

DUTIES

Hairdressing – haircutting, hair tinting, hair coloring, straightening, brushing, beautifying or otherwise treating by any means the hair of any person.
Manicuring – massage or beautifying the hands and nails of any person.
Giving permanents – waving hair by heat or chemical means.
Massaging – massage and manipulation of the muscles of the face, neck and scalp.
Shampooing – cleansing the hair by application of the appropriate preparations.
Treating the scalp – application of appropriate preparations to the scalp and/or massage and manipulation of the scalp.

SOME PERSONAL QUALIFICATIONS

Friendly and pleasant disposition.
Ability to get along with all types of people.
Finger dexterity.
Good health, patience, neat appearance, willingness to stand on feet for long periods of time.
Desire to serve others and pride in pleasing customers.

TRAINING

1200 hours training time in a public or private school of cosmetology.
To enter program a student must meet the following requirements:
(a) Be a citizen of the United States.
(b) Be of good moral character and temperate habits.
(c) Furnish to the Board a certificate from a licensed physician of this state dated not more than 30 days prior to the application.
To enter a public school program a student must be 16 years of age and have a high school degree at the end of the course.
To enter a private school the student must have a high school diploma, or, if over 18 years of age, must have completed the 10th grade or passed a standard equivalency test.
Must pass written and performance examination given by the State Board of Cosmetology, at completion of the course.

COSMETOLOGY SPECIALIST

Shampooer, Manicurist, Pedicurist, and Facialist

The cosmetology specialist is any person qualified to practice manicuring, pedicuring, facials, and shampooing in a cosmetology salon.

DUTIES

The specialist works at special tables and shampoo area using special equipment during the procedures.

DEFINITION

Facial massage or treatment of the face or neck with oils, creams, lotions, and applying cosmetic preparations.

Manicuring shaping, polishing, tinting, coloring, cleansing the nails, and the massage of the hands of any person.

Pedicuring shaping, polishing, tinting, cleansing the nails of the feet, and the massage of the feet of any person.

Shampooing the cleansing of any person's hair and scalp with appropriate preparations.

SOME PERSONAL QUALIFICATIONS

Pleasant disposition, with ability to work with all types of people.
Willingness to perform same operations repeatedly during the day.
Neat, attractive appearance and a friendly disposition with customers.
Hand dexterity is helpful.

TRAINING

The required time to train is 500 hours in a public or private school of cosmetology.

To enroll, the student must be 17 years of age and a high school graduate. This requirement is waived if the student is 18 years of age, but must have completed the 10th grade or pass a standard equivalency test that is administered by the testing center approved by the State Board of Education.

Must furnish to the Board a certificate from a licensed physician stating that the student is free of contagious or infectious diseases.

Their Work
is
Play

CITY DIRECTOR OF RECREATION

The city director of recreation plans, organizes and directs a large recreational program for children, teenagers and adults.

DUTIES

Plans a wide variety of activities including competitive sports, social and community events, free play and special events.
Interviews and appoints persons for high level positions on the staff.
Works with the general manager of parks, park engineer and architects in planning, acquiring and developing new areas for recreation.
Writes specifications for buying equipment such as swings, slides, chairs, tables, games, etc.
Prepares the budget for the department.
Meets and speaks to clubs and civic groups and keeps the public informed about the work of the department.
Performs other related duties.

SOME PERSONAL QUALIFICATIONS

Ability to manage and conduct a planned community recreational program.
Knowledge of what is required for a program, the arrangement of play areas, and a considerable knowledge of the rules of play of a wide variety of games.
An interest in and a genuine liking of sports of all kinds.
Understanding of human nature and ability to deal with all types of people.
Good judgment in management of the department, including the budgeting of large sums of money.
Ability to express ideas clearly, both orally and in writing.

TRAINING

High school graduation.
College degree (4 years) with major work in physical education or recreational administration.
Master's degree — an additional 1 or 2 years of college training.
Experience in recreational work that involves supervising others.

RECREATION SUPERVISOR

The recreation supervisor plans and supervises a variety of recreational activities and assists in the overall planning of a community-wide recreation program.

DUTIES

Plans, directs and supervises the work of a staff assigned to various playgrounds, recreation centers, athletic fields and gymnasiums.
Supervises recreational activities; organizes athletic leagues; plans and directs tournaments.
Assists in conducting city-wide special events sponsored by the department.
Visits playgrounds or athletic fields, noting any changes or repairs that need to be made.
Holds staff meetings to talk with members about matters relating to recreation.
Performs other related duties.

SOME PERSONAL QUALIFICATIONS

Ability to plan, organize, and supervise the work of others.
A genuine love of people and the ability to get along with all types.
Considerable knowledge of public recreation administration and the operation of planned playground programs.
Patience; ability to work under pressure; good judgment.
Ability to communicate and make one's self easily understood.

TRAINING

High school graduation.
Graduation from college or university (4 years) with major study in physical education or recreational administration.

COMMUNITY CENTER DIRECTOR

The community center director has the responsibility for the activities of the total recreation program at a recreation center.

DUTIES

Plans and promotes activities that make the center useful for various groups throughout the day and at night.
Organizes a committee of community representatives to help plan for and determine the needs of the community.
Promotes, supervises and often takes part in such recreation activities as dancing, sewing, arts and crafts, swimming, tennis, table games, basketball, softball, football, etc.
Organizes groups to take part in table tennis tournaments, swim meets, ball games of all kinds, etc.
Supervises the maintenance of the building and grounds.
Secures volunteer instructors for the various classes, such as judo, flower arranging, etc.
Performs other related duties.

SOME PERSONAL QUALIFICATIONS

Ability to plan and organize many types of activities.
Pleasant personality; ability to get along with people of all ages.
Ability to plan and supervise the work of others.
Considerabe knowledge of various types of recreation, including rules for games, etc.
Willingness to work when necessary.

TRAINING

High school graduation.
College degree (4 years) with major study in physical education or similar fields.

RECREATION LEADER

The recreation leader guides and supervises recreational activities of all age groups in a recreation center or on a playground.

DUTIES

Plans playground activities such as softball, basketball, football, volleyball and track and field events, working with different age groups.
Organizes and sometimes teaches classes in handicrafts, painting, dramatics, etc.
Teaches the rules of games and often acts as official or referee for these games.
Plans such activities as skating parties, dances or camping trips.
Has groups take part in city-wide tournaments, track meets, swimming competition and other events.
Performs related work as required.

SOME PERSONAL QUALIFICATIONS

A knack for organizing and working well with others.
Knowledge of a variety of games and the rules involved.
Knowledge of the objectives of public recreation.
Ability to establish and to keep good working relationships with children and older groups.

TRAINING

High school graduation.
2 years of college required.

GLOSSARY

The words which were suggested as related vocabulary for each program are defined in this glossary. You may, of course, wish to modify the definitions for your pupils.

Definitions were adapted from the following:

Barnhart, Clarence L. (ed.) *The World Book Dictionary.* Chicago: Field Enterprises Educational Corporation, 1968.

Webster's Seventh New Collegiate Dictionary. Springfield, Massachusetts: G. and C. Merriam Company, 1967.

academic—of, relating to, or associated with an academy or school, especially of higher learning; of or relating to literary or art rather than technical or professional studies.

account—a statement of money received and paid out; a record of business.

Addressograph—a machine for printing addresses automatically. (Begins with capital letter because it is a trademark.)

advertise—to give public notice of in newspapers, over the radio, by television, etc.

aircraft—a machine designed for navigation in the air and to be supported by air.

allocate—to assign a share; to distribute.

alloy—a mixture of two or more metals or a metal and some other substance.

apparatus—a set of materials or equipment designed for a particular use; anything necessary to carry out a purpose.

apparel—clothing; dress.

assemble—to fit together the parts of something.

assignment—a post or duty to which one is appointed; a piece of work to be done.

attendance—attending; the number of times a person attends or is present.

balance—an amount in excess, especially on the credit side of an account.

bridge—a partial denture attached to adjacent teeth.

budget—a plan for spending and saving.

cable—a protected bundle of wires to carry an electric current, or a group of such conductors insulated from one another.

cash—money, or something that equals money, such as a check, paid at the time of buying something.

catalog—a list of items in some collection, either identifying each item very briefly or describing it more fully.

charge—to have the price of a purchase deferred for later payment.

check—a written order directing a bank to pay money as instructed.

checkbook—a book containing blank checks on a bank.

chronic—continuing a long time; marked by long duration or frequent recurrence.

circuit—the complete path over which an electric current flows.

clerical—of or relating to a clerk or office worker.

communicable—capable of being communicated; transmittable; as a communicable disease.

community—the people of any district; a group of people living together.

component—an essential part; ingredient.

computer—a mechanical, electrical, or electronic device for solving complex problems quickly.

conduit—a tube or underground passage for electric wires or cables.

connection—the act or process of joining together; a contact between two circuits or electrical wires.

correct—to make or set right; to point out for amendment the errors or faults of.

craft—an occupation or trade requiring manual dexterity or artistic skill.

credit—delayed payment; time allowed for delayed payment.

crown—the part of a tooth outside the gum or an artificial substitute for this.

curriculum—the courses offered by an educational institution or one of its branches.

customer—a person who buys, especially a regular patron of a particular store; buyer; purchaser.

decay—rot; your teeth decay if they are not cared for.

demonstrate—to show clearly; to prove or make clear by reasoning or evidence.

denture—a set of teeth; an artificial replacement for one or more teeth, especially: a set of false teeth.

department—a distinct sphere; a division of a college or school giving instruction in a particular subject.

deposit—something placed for safekeeping, as money deposited in a bank.

design—to conceive and plan out in the mind; to make a drawing, pattern, or sketch; to draw the plans for.

diagnosis—the art or act of finding out what disease a person or animal has by examination and careful study of the symptoms.

disease—an impairment of the normal state of the living animal or plant body that affects the performance of the vital functions; sickness; illness.

disinfect—to free from infection, especially by destroying harmful germs.

duct—a single pipe for electric cables.

earn—to receive for work or service; be paid.

education—the act or process of educating or of being educated; the field or study that deals mainly with methods of teaching and learning in schools.

emergency—a sudden need for immediate action; an unforeseen combination of circumstances, or the resulting state, that calls for immediate action.

endorse—to write on the back of, especially to sign one's name as payee on the back of a check to obtain cash or credit.

engine—a machine for converting any of various forms of energy into mechanical force and motion.

environment—surrounding things, conditions, or influences; the aggregate of social, cultural and physical conditions that influence the life of an individual or community.

epidemic—an outbreak or product of sudden rapid spread, growth, or development.

equipment—the set of articles or physical resources serving to equip a person or thing; as the implements used in an operation or activity.

examine—to inspect closely.

exercise—to use repeatedly in order to strengthen or develop.

extract—to draw forth; especially, to pull out forcibly.

fabricate—to construct, manufacture, or build.

file—to arrange in order for preservation or reference.

filling—something put in to stop up or close, as a filling in a tooth.

frame—the support over which something is stretched or built, as the frame of a house.

franchise—the privilege, often exclusive, of selling the products of a manufacturer in a given area.

germ—a microscopic (very small) animal or plant, especially one that causes disease.

good will—the good reputation and steady trade that a business has with its customers; a part of the value of a business that is largely due to the good opinion of its customers.

high-rise—of or having to do with a building which has many stories.

install—to put in position for use.

instruction—lesson; the action, practice or profession of a teacher.

instrument—a means whereby something is achieved, performed, or furthered; utensil, implement.

job—employment; work done regularly; a piece of work.

journeyman—a worker who has learned a trade and works for another person, usually by the day; an experienced reliable workman in any field.

lecture—a talk given before an audience or class, especially for instruction.

livelihood—a means of keeping alive; support.

lumber—timber or logs, especially when dressed for use.

major—a subject of academic study chosen as a field or specialization.

master—an expert, such as a skilled workman; a workman qualified to teach apprentices.

medication—a medicinal substance; used for tending or curing disease.

menu—a list of the dishes that are to be served at a meal.

merchandise—goods for sale; articles that are or may be bought and sold.

microscope—an instrument with a lens for making small things look larger.

nutrition—food, nourishment. The process by which food is used in the body.

occupation—work of any kind which a person does regularly or for which he is trained, whether or not he is working at the moment or is paid.

oral—of, given through, or affecting the mouth.

order—a statement or list of things telling a store or tradesman what you wish sent.

parcel post—the branch of the postal service that carries parcels or packages.

passbook—a small book in which a bank keeps a record of what a person deposits and withdraws; chiefly used in the United States for savings accounts.

patient—an individual awaiting, or under, medical care and treatment.

pneumatic—of, relating to, or using air, wind, or other gas; moved or worked by air pressure.

pollution—a polluting; defiling; uncleanness.

prepare—to make ready.

prescription—a written direction or order for medicine.

pressure—a state of strain, as, working under pressure.

preventive—devoted to or concerned with prevention: precautionary.

procedure—a particular way of accomplishing something or of acting; a series of steps followed in a regular definite order.

prototype—an original model on which something is patterned.

rehabilitate—to restore to good condition.

relay—an electromagnetic device in which a weak current controls a strong current. A relay is used in transmitting telegraph or telephone messages over long distances.

responsibility—the quality or state of being responsible: as moral, legal, or mental accountability.

salary—a fixed payment made periodically to a person, especially by the week or month, for regular work.

sanitary—characterized by or readily kept in cleanliness.

schedule—to appoint, assign or designate for a fixed future time.

service—a helpful act or acts; conduct that is useful to others; work for others; aid.

skill—the ability to use one's knowledge effectively and readily in execution or performance; a learned power of doing a thing competently.

solder—a metal that can be melted and used for joining; to fasten with solder.

staff—the people who assist a director in carrying out an assigned task.

statistics—a branch of mathematics dealing with the collection, analysis, interpretation, and presentation of masses of numerical data.

sterilize—to make sterile; as to free from living germs.

stethoscope—an instrument used to detect and study sounds produced in the body.

stock—things for use or for sale; supply used as it is needed.

survey—to determine the form, extent, and situation of a tract of ground; to measure land carefully for size and shape.

switchboard—a panel or group of panels containing the necessary switches, meters, and other devices for opening, closing, combining, controlling, measuring, and protecting a number of electric circuits. A telephone switchboard has plugs for connecting one line to another.

teletypewriter—a telegraphic device sending and receiving signals by means of two instruments resembling typewriters.

therapy—remedial treatment of bodily disorder.

thrust—force exerted by the rearward ejection of gases, etc., from a jet engine or rocket engine that produces forward movement.

trade—the business or work in which one engages regularly; an occupation requiring manual or mechanical skill.

transaction—the carrying on of business.

transit—an instrument used in surveying to measure horizontal and vertical angles.

verify—to prove to be true or correct.

vocation—an occupation, business, profession, or trade.

weight—how heavy a thing is; amount a thing weighs.

weld—to join together by hammering or pressing while soft and hot.

REFERENCES

RECOMMENDED FOR TEACHERS

United States Department of Labor. "Occupational Outlook Handbook." Washington: Government Printing Office, 1970.

United States Department of Labor. "Occupational Outlook Reprint Series." Washington: Government Printing Office, 1970.

Hopke, William E. "Encyclopedia of Careers and Vocational Guidance." 2 vols. Garden City, New York: Doubleday and Company, Inc., 1967.

United States Department of Labor. "Dictionary of Occupational Titles." Third edition. 2 vols. Washington: Government Printing Office, 1965.